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Mass Transfer in a Hollow-Cathode Discharge. (E) K. A. Oganezov, A. Kh. Chamagua, and B. Ya. Chikhladze. 14, 963 (1970) [14, 1100 (1969)]
CHISTYAKOV, I. G.
Textures of Cholesterol-Type Liquid Crystals. (E) I. G. Chistyakov and L. A. Gusakova. 14, 132 (1969) [14, 153 (1969)]
X-Ray Analysis of the Structure of Para-Azoxyanisole in an Alternating Electric Field. (E) E. A. Kosterin and I. G. Chistyakov. 14, 252 (1969) [14, 321 (1969)]
The Optical Activity of Cholesteryl Propionate–p-Azoxyanisole Mixtures. (E) V. N. Aleksandrov and I. G. Chistyakov. 14, 431 (1969) [14, 520 (1969)]
CHUFAROV, G. I.
Method of Determining the Contribution of the Defectiveness of the Components to the Overall Defectiveness of Solutions of the MeO Type from the Changes in Their Crystal-Lattice Parameters. (T/E) M. P. Bogdanovich, Yu. P. Vorob'ev, A. N. Men', and G. I. Chufarov. 14, 570 (1970) [14, 677 (1969)]
Synthesis and Mutual Solubility in Spinel Solid Solutions in Me–Ti–Fe–O Systems (Me = Zn, Co, Ni, and Mn). (E) A. A. Shchepetkin, R. G. Zakharov, M. I. Zinigrad, and G. I. Chufarov. 14, 761 (1970) [14, 889 (1969)]
CHUPAKHIN, I. P.
X-Ray Diffraction Study of the Crystalline Hydrates of the Perrhenates of the Alkaline Earth Metals. (E) M. B. Varfolomeev, I. P. Chupakhin, and V. E. Plyushchev. 14, 924 (1970) [14, 1065 (1969)]
COUFOVÁ, P.
Sound of the Principal Optical and Dielectric Properties of Barium Titanate Single Crystals Containing Added Nickel Grown from a Potassium Fluoride Melt. (E) P. Coufová and J. Novák. 14, 61 (1969) [14, 79 (1969)]

DANIL'CHUK, G. S.
Investigation of the Infrared Absorption Spectra of a Triglycinsulfate Crystal in Polarized Light during the Ferroelectric Phase Transition. (E) G. S. Danil'chuk, M. A. Itskovskii, and I. S. Kremenchugskii. 14, 866 (1970) [14, 998 (1969)]
DAVYDOVA, M. A.
Statistical Investigation of the Distribution of the Distances between Pinning Points of Dislocations. (E/T) A. I. Landau, V. N. Borzhkovskaya, M. T. Torkatyuk, and M. A. Davydova. 14, 238 (1969) [14, 303 (1969)]
DEART, A. F.
Minimization of the Divergence Factor of Structures by Application of a Random Search Method. (T) L. A. Muradyan, A. F. Deart, and V. I. Burdina. 14, 501 (1970) [14, 593 (1969)]
DEM'YANETS, L. N.
Crystallization of Neodymium Hydroxyl-Chloride $Nd(OH)_2Cl$ Under Hydrothermal Conditions. (E) L. N. Dem'yanets and E. N. Emel'yanova. 14, 654 (1970) [14, 753 (1969)]
Hydrothermal Crystallization in $MeMoO_4$–$LiCl$–H_2O Systems. (E) L. N. Dem'yanets. 14, 833 (1970) [14, 955 (1969)]
DEPTSOVA, L. A.
Piezooptic Constants of LiF, NaF, NaCl, NaI, KCl, KBr, KI, and RbI Single Crystals. (E) S. S. Gorbach, L. A. Deptsova, G. F. Dobrzhanskii, V. Yu. Markovskii, and M. P. Shaskol'skaya. 14, 627 (1970) [14, 729 (1969)]
DERYAGIN, B. V.
Filamentary Diamond Crystals. (E) B. V. Deryagin, L. L. Builov, V. M. Zubkov, A. A. Kochergina, and D. V. Fedoseev. 14, 449 (1969) [14, 535 (1969)]
DISTLER, G. I.
Visualization of the Domain Structure of Crystals of Triglycine Sulfate at the Electron-Microscopic Level. (E) G. I. Distler, V. P. Konstantinova, and V. P. Vlasov. 14, 70 (1969) [14, 90 (1969)]
Investigation of Color Centers in Alkali Halide Crystals at the Electron Microscopic Level. (E) G. I. Distler, V. N. Lebedeva, and V. V. Moskvin. 14, 559 (1970) [14, 664 (1969)]
Effects of Surface Electrical Properties of a Crystal Substrate on Crystallization. (E) G. I. Distler and V. P. Vlasov. 14, 747 (1970) [14, 872 (1969)]
Electrical Properties of the Surfaces of Ionic Crystals. (E) G. I. Distler and E. I. Tokmakova. 14, 913 (1970) [14, 1055 (1969)]
Oriented Crystallization of Gold on a Sodium Chloride Crystal Surface through an Amorphous Carbon Film. (T) Yu. M. Gerasimov and G. I. Distler. 14, 964 (1970) [14, 1101 (1969)]
DMITRIEV, V. A.
Crystal Structure of Solid Solutions in the ZnSe–CdSe System. (E) K. V. Shalimova, A. F. Botnev, V. A. Dmitriev, N. Z. Kognovitskaya, and V. V. Starostin. 14, 531 (1970) [14, 629 (1969)]
DMITRIEVA, F. I.
The Preparation and Certain Properties of Single-Crystal $LaNbO_4$. (E) L. M. Belyaev, F. I. Dmitrieva, N. M. Melankholin, A. A. Popova, and L. V. Soboleva. 14, 294 (1969) [14, 359 (1969)]
DMITRIEVA, T. V.
Use of the Mössbauer Effect to Study the Distribution of Fe and Sn Impurity Atoms in Vanadium Pentoxide. (E) A. A. Abdullaev, L. M. Belyaev, T. V. Dmitrieva, G. F. Dobrzhanskii, V. V. Ilyukhin, and I. S. Lyubutin. 14, 389 (1969) [14, 473 (1969)]
DMITRUK, M. V.
Laser Emission from CaF_2–YF_3 Crystals Containing Ho^{3+} and Er^{3+}. (E) M. V. Dmitruk and A. A. Kaminskii. 14, 620 (1970) [14, 722 (1969)]
DOBRZHANSKII, G. F.
Use of the Mössbauer Effect to Study the Distribution of Fe and Sn Impurity Atoms in Vanadium Pentoxide. (E) A. A. Abdullaev, L. M. Belyaev, T. V. Dmitrieva, G. F. Dobrzhanskii, V. V. Ilyukhin, and I. S. Lyubutin. 14, 389 (1969) [14, 473 (1969)]
Piezooptic Constants of LiF, NaF, NaCl, NaI, KCl, KBr, KI, and RbI Single Crystals. (E) S. S. Gorbach, L. A. Deptsova, G. F. Dobrzhanskii, V. Yu. Markovskii, and M. P. Shaskol'skaya. 14, 627 (1970) [14, 729 (1969)]
Growth of Vanadium Pentoxide Single Crystals and Their Dislocation Structure. (E) A. S. Abdullaev, L. M. Belyaev, I. V. Binarov, G. F. Dobrzhanskii, and R. G. Yankelevich. 14, 957 (1970) [14, 1095 (1969)]
DORFMAN, V. F.
Nucleation During Crystal Growth. (T/E) V. F. Dorfman, M. B. Galina, and L. I. Trusov. 14, 55 (1969) [14, 71 (1969)]
DROBYSHEV, L. A.
Growing, Structure, and Magnetic Properties of $PbMn_{1/2}Nb_{1/2}O_3$ Single Crystals. (E) L. A. Drobyshev, B. I. Al'shin, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 634 (1970) [14, 736 (1969)]
Electron-Diffraction and X-Ray-Diffraction Investigation of Atomic Displacements in the Ferromagnet $Pb(Fe_{0.5}, Nb_{0.5})O_3$. (E) G. L. Platonov, L. A. Drobyshev, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 692 (1970) [14, 800 (1969)]

DUKOVA, E. D.
Development of Nonsingular Surfaces on Crystals Growing from the Vapor Phase. (E/T) E. D. Dukova and D. Nenov. 14, 83 (1969) [14, 106 (1969)]
Anisotropy in the Growth Rate as Derived from Morphological-Kinetic Data on Growth Steps. (T) A. A. Chernov and E. D. Dukova. 14, 150 (1969) [14, 169 (1969)]
Morphology and Surface Kinetics of the Growth of β-Methylnaphthalene from Alcohol Solution: An Intermediate Adsorption Film of Melt. (E) E. D. Dukova and E. V. Gavrilenko. 14, 736 (1970) [14, 856 (1969)]
DUNIN-BARKOVSKII, R. L.
Synthesis and Properties of Mullite. (E) R. L. Dunin-Barkovskii, G. P. Klientova, and E. E. Lisitsyna. 14, 651 (1970) [14, 750 (1969)]
DUTCHAK, Ya. I.
Structure of Cadmium Sulfide Films Sublimated onto Slid Faces of Single NaCl, KCl, and KBr Faces. (E) A. G. Mikolaichuk, Ya. I. Dutchak, and D. M. Freik. 14, 148 (1969) [14, 167 (1969)]
DVORYANKIN, I. F.
Geometry of the Diffraction Patterns of Slow Electrons Reflected by the Surface of Crystals with a NaCl Lattice Type. (E) I. F. Dvoryankin, A. Yu. Mityagin, and V. P. Orlov. 14, 772 (1970) [14, 902 (1969)]
DVORYANKIN, V. F.
Production of Epitaxial CdS Films by Gas Transport Reactions. (E) S. A. Aitkhozhin, I. M. Kotelyanskii, G. B. Bokii, V. F. Dvoryankin, G. G. Dvoryankina, and V. V. Panteleev. 14, 309 (1969) [14, 373 (1969)]
DVORYANKINA, G. G.
Production of Epitaxial CdS Films by Gas Transport Reactions. (E) S. A. Aitkhozhin, I. M. Kotelyanskii, G. B. Bokii, V. F. Dvoryankin, G. G. Dvoryankina, and V. V. Panteleev. 14, 309 (1969) [14, 373 (1969)]

EFENDIEV, G. A.
Electron Diffraction Investigation of the Phase Formation and the Kinetics of Phase Transformations in the Ag–Se System. (E) G. A. Efendiev, I. R. Nuriev, and R. B. Shafizdade. 14, 787 (1970) [14, 915 (1969)]
EGOROV-TISMENKO, Yu. K.
Crystal Structure of Zinc Chkalovite $Na_2Zn[Si_2O_6]$. (E) E. L. Belokoneva, Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov. 14, 918 (1970) [14, 1060 (1969)]
EMEL'YANOVA, E. N.
Crystallization of Neodymium Hydroxyl-Chloride $Nd(OH)_2Cl$ Under Hydrothermal Conditions. (E) L. N. Dem'yanets and E. N. Emel'yanova. 14, 654 (1970) [14, 753 (1969)]

FAEK, M. K.
A Neutron Diffraction Study of the Structure of Magnetoplumbite. (E) O. P. Aleshko-Ozhevskii, M. K. Faek, and I. I. Yamzin. 14, 367 (1969) [14, 447 (1969)]
FALALEEV, O. V.
Determination of the Parameters of the Orientational Dependence of the Second Moment in Structural Investigations by the Nuclear Magnetic Resonance Method. (E/T) O. V. Falaleev, L. G. Falaleeva, and A. G. Lundin. 14, 45 (1969) [14, 59 (1969)]
FALALEEVA, L. G.
Determination of the Parameters of the Orientational Dependence of the Second Moment in Structural Investigations by the Nuclear Magnetic Resonance Method. (E/T) O. V. Falaleev, L. G. Falaleeva, and A. G. Lundin. 14, 45 (1969) [14, 59 (1969)]
FEDOROVICH, L. D.
Peculiarities of Crystallization of Barium Hexaferrite on Seeds. (E) S. Sh. Gendelev, R. I. Zvereva, and L. D. Fedorovich. 14, 457 (1969) [14, 542 (1969)]
FEDOSEEV, D. V.
Filamentary Diamond Crystals. (E) B. V. Deryagin, L. L. Builov, V. M. Zubkov, A. A. Kochergina, and D. V. Fedoseev. 14, 449 (1969) [14, 535 (1969)]

FEDULOV, S. A.
Production and Optical Properties of $Bi_{12}GeO_{20}$ Single Crystals. (E) A. I. Safonov, S. A. Baryshev, T. I. Nikoforova, G. N. Antonov, and S. A. Fedulov. 14, 131 (1969) [14, 152 (1969)]
Growth of Aluminum Garnet Single Crystals Containing a Neodymium Impurity. (E) V. Z. Bychkov, S. A. Fedulov, A. S. Vlasov, B. S. Skidan, and V. K. Balashov. 14, 981 (1970) [14, 1115 (1969)]
FESENKO, E. G.
The Crystal Structure of Barium Iron (IV) Oxides in the System $BaFeO_3$–$BaFeO_{2.5}$. (E) I. N. Belyaev, E. G. Fesenko, V. S. Filip'ev, and I. G. Kokarovtseva. 14, 782 (1970) [14, 910 (1969)]
Synthesis and Structural Studies of Some Perovskites Which Contain Bismuth. (E) E. T. Shuvaeva and E. G. Fesenko. 14, 926 (1970) [14, 1066 (1969)]
FILATOV, S. K.
Structural Characteristics of Cubic ZrO_2 Stabilized by Calcium. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 414 (1969) [14, 505 (1969)]
Anomalous Thermal Expansion of ZrO_2 and HfO_2 over the Range 20–1200°C. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 696 (1970) [14, 804 (1969)]
Errors in Powder-Pattern Determination of Cell Parameters in Low-Symmetry Crystals. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 849 (1970) [14, 978 (1969)]
FILIP'EV, V. S.
The Crystal Structure of Barium Iron (IV) Oxides in the System $BaFeO_3$–$BaFeO_{2.5}$. (E) I. N. Belyaev, E. G. Fesenko, V. S. Filip'ev, and I. G. Kokarovtseva. 14, 782 (1970) [14, 910 (1969)]
FISHMAN, Yu. M.
Slip Elements and Dislocation Reactions in Ammonium Dihydrophosphate Crystals. (E) N. A. Pasternak, Yu. M. Fishman, N. F. Kirilyuk, and A. A. Predvoditelev. 14, 243 (1969) [14, 310 (1969)]
Diffraction Topography by Scanning with a Wide X-Ray Beam. (E) V. G. Lyuttsau and Yu. M. Fishman. 14, 720 (1970) [14, 835 (1969)]
FISTUL', V. I.
On the Nature of "Growth Bands" in Epitaxial Layers of GaP_xAs_{1-x}. (T) F. A. Gimel'farb, E. S. Kopeliovich, V. N. Maslov, R. L. Petrusevich, and V. I. Fistul'. 14, 967 (1970) [14, 1104 (1969)]
FOMIN, V. G.
Nature of the Inclusions in Gold-Doped Germanium Single Crystals. (E) V. G. Fomin and M. G. Mil'vidskii. 14, 281 (1969) [14, 348 (1969)]
FOTIEV, A. A.
Crystal Optics of Strontium Vanadates and Phase Diagram of V_2O_5–SrO System. (E) A. A. Fotiev and V. A. Makarov. 14, 621 (1970) [14, 723 (1969)]
FRANK-KAMENETSKII, V. A.
Structural Characteristics of Cubic ZrO_2 Stabilized by Calcium. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 414 (1969) [14, 505 (1969)]
Anomalous Thermal Expansion of ZrO_2 and HfO_2 over the Range 20–1200°C. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 696 (1970) [14, 804 (1969)]
Errors in Powder-Pattern Determination of Cell Parameters in Low-Symmetry Crystals. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 849 (1970) [14, 978 (1969)]
FRIDKIN, V. M.
The Dielectric Properties of SbSI as a Function of Temperature and Hydrostatic Pressure. (E) E. I. Gerzanich and V. M. Fridkin. 14, 234 (1969) [14, 298 (1969)]
FREIK, D. M.
Structure of Cadmium Sulfide Films Sublimated onto Slid Faces of Single NaCl, KCl, and KBr Faces. (E) A. G. Mikolaichuk, Ya. I. Dutchak, and D. M. Freik. 14, 148 (1969) [14, 167 (1969)]
FURMAKOVA, L. N.
The Microblock Structure of Hydrothermal Crystals of Corundum. (E) V. N. Voitsekhovskii, P. I. Nikitichev, Z. F. Smirnova, and L. N. Furmakova. 14, 733 (1970) [14, 852 (1969)]

FUTERGENDLER, S. I.
X-Ray Investigation of a Natural Diamond with Garnet Inclusions in the Form of a Crystallized Silicate Melt. (E) S. I. Futergendler. 14, 248 (1969) [14, 317 (1969)]

GAKH, S. G.
The Space Charges and Electrical Properties of Single Crystals of Barium Titanate. (E) V. Z. Borodin, S. G. Gakh, M. I. Gorelov, and V. G. Kuznetsov. 14, 805 (1970) [14, 929 (1969)]

GALINA, M. B.
Nucleation During Crystal Growth. (T/E) V. F. Dorfman, M. B. Galina, and L. I. Trusov. 14, 55 (1969) [14, 71 (1969)]

GALKIN, G. I.
Temperature Changes in the Structure of Barrier Type Anodic Oxide Films on Aluminum. (E) G. I. Galkin, V. V. Cherny-Shev, and N. E. Markova. 14, 645 (1970) [14, 746 (1969)]

GANEEV, I. G.
Electrooptical Properties of Thallium-Cadmium Langbeinite. (E) A. S. Vasilevskaya, I. G. Ganeev, I. S. Rez, and A. S. Sonin. 14, 421 (1969) [14, 511 (1969)]

GARASHINA, L. S.
A Laser Based on $SrF_2-YF_3-Nd^{3+}$ Crystals. (E) L. S. Garashina, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 799 (1970) [14, 925 (1969)]

GARBER, R. I.
Multiplication of Dislocations under the Joint Action of Periodic and Increasing Stresses. (E) R. I. Garber and T. T. Mogil'nikova. 14, 115 (1969) [14, 137 (1969)]

GAVRILENKO, E. V.
Morphology and Surface Kinetics of the Growth of β-Methylnaphthalene from Alcohol Solution: An Intermediate Adsorption Film of Melt. (E) E. D. Dukova and E. V. Gavrilenko. 14, 736 (1970) [14, 856 (1969)]

GAVRILOVA, I. V.
Dielectric Properties of KDP Crystals Containing Additions of Chromium. (E) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, I. V. Gavrilova, A. N. Kovalenko, S. G. Savvinova, and A. M. Savvinov. 14, 816 (1970) [14, 940 (1969)]

GAVRILOVA, N. D.
Characteristic Features of the Pyroelectric Effect and Electrical Conductivity in Single Crystals of $LiNbO_3$ in the Range 20-250°C. (E) M. B. Roitberg, V. K. Novik, and N. D. Gavrilova. 14, 814 (1970) [14, 938 (1969)]

GEGIADZE, G. G.
Impurity-Atom Disturbance of Matrix Atoms in an Equilibrium Solid Solution. (T) E. Z. Vintaikin and G. G. Gegiadze. 14, 566 (1970) [14, 672 (1969)]

GENDELEV, S. Sh.
Peculiarities of Crystallization of Barium Hexaferrite on Seeds. (E) S. Sh. Gendelev, R. I. Zvereva, and L. D. Fedorovich. 14, 457 (1969) [14, 542 (1969)]

GERASIMOV, Yu. M.
Oriented Crystallization of Gold on a Sodium Chloride Crystal Surface through an Amorphous Carbon Film. (T) Yu. M. Gerasimov and G. I. Distler. 14, 964 (1970) [14, 1101 (1969)]

GERAS'KIN, V. V.
Dislocations in Single Crystals with the Würtzite Structure. (E) A. A. Blistanov and V. V. Geras'kin. 14, 550 (1970) [14, 652 (1969)]
Slip Lines in CdS after Plastic Deformation. (E) A. A. Blistanov, O. M. Kugaenko, V. V. Geras'kin, and M. P. Shaskol'skaya. 14, 941 (1970) [14, 1080 (1969)]

GERZANICH, E. I.
The Dielectric Properties of SbSI as a Function of Temperature and Hydrostatic Pressure. (E) E. I. Gerzanich and V. M. Fridkin. 14, 234 (1969) [14, 298 (1969)]

GIL'VARG, A. B.
The Growth of Potassium Hydrogen Phthalate Crystals and Their Optical, Piezoelectric, and Elastic Properties. (E) L. M. Belyaev, G. S. Belikova, A. B. Gil'varg, and I. M. Sil'vestrova. 14, 544 (1970) [14, 645 (1969)]

GIMEL'FARB, F. A.
On the Nature of "Growth Bands" in Epitaxial Layers of GaP_xAs_{1-x}. (T) F. A. Gimel'farb, E. S. Kopeliovich, V. N. Maslov, R. L. Petrusevich, and V. I. Fistul'. 14, 967 (1970) [14, 1104 (1969)]

GLADYSHEVSKII, E. I.
Crystal Structure of $CeNiSi_2$ and Kindred Compounds. (E) O. P. Bodak and E. I. Gladyshevskii. 14, 859 (1970) [14, 990 (1969)]

GLUSHKOVA, V. P.
Crystal Structure of N-Thiocyanogen Phenylene. (E) Z. P. Povet'eva, Z. V. Zvonkova, and V. P. Glushkova. 14, 588 (1970) [14, 696 (1969)]

GOL'DER, G. A.
Crystal and Molecular Structure of α-Br-Anthraquinone. (E) N. K. Klimasenko, G. A. Gol'der, and G. S. Zhdanov. 14, 207 (1969) [14, 266 (1969)]
Crystal and Molecular Structure of α-Chloroanthraquinone. (E) N. L. Klimasenko and G. A. Gol'der. 14, 586 (1970) [14, 694 (1969)]

GOLOVKIN, V. S.
Neutron Diffraction Study of Zirconium Carbohydride. (E) V. N. Bykov, V. S. Golovkin, V. P. Kalinin, V. A. Levdik, and V. I. Shcherbak. 14, 785 (1970) [14, 913 (1969)]

GORBACH, S. S.
Piezooptic Constants of LiF, NaF, NaCl, NaI, KCl, KBr, KI, and RbI Single Crystals. (E) S. S. Gorbach, L. A. Deptsova, G. F. Dobrzhanskii, V. Yu. Markovskii, and M. P. Shaskol'skaya. 14, 627 (1970) [14, 729 (1969)]

GORBATYI, L. V.
Geometry of Measurements of the Integral Intensity for Single Crystals in Diffractometers by Inclined Exposure Schemes. (T) D. M. Kheiker, L. V. Gorbatyi, and É. L. Lube. 14, 196 (1969) [14, 251 (1969)]

GORDEEVA, N. V.
New Crystals Belonging to the Family of Alkali Trihydroselenites, the Ferroelectric $RbH_3(SeO_3)_2$ and the Linear Dielectric $NH_4H_3(SeO_3)_2$. (E) L. A. Shuvalov, N. R. Ivanov, N. V. Gordeva, and L. F. Kirpichnikova. 14, 554 (1970) [14, 658 (1969)]

GORDIENKO, L. A.
Anisotropy of Light Scattering at Microscopic Defects in Artificial Quartz. (E) N. M. Melankholin, E. V. Antonov, I. N. Guseva, L. A. Gordienko, and V. E. Khadzhi. 14, 376 (1969) [14, 456 (1969)]
Hydrothermal Growth of Large Dislocation-Free Crystals of Quartz. (E) L. A. Gordienko, V. F. Miuskov, V. E. Khadzhi, and L. I. Tsinober. 14, 454 (1969) [14, 539 (1969)]
Defect Decoration and Increased Radiation Resistance in Quartz. (E) A. A. Shternberg, L. A. Gordienko, and L. I. Tsinober. 14, 728 (1970) [14, 845 (1969)]

GORELIK, V. S.
Selection Rule for the Second Order Raman and Infrared Absorption Spectra for Crystals. (T) V. S. Gorelik. 14, 108 (1969) [14, 132 (1969)]

GORELOV, M. I.
The Space Charges and Electrical Properties of Single Crystals of Barium Titanate. (E) V. Z. Borodin, S. G. Gakh, M. I. Gorelov, and V. G. Kuznetsov. 14, 805 (1970) [14, 929 (1969)]

GRANADCHIKOVA, B. G.
An Infrared Spectroscopic Study of Tourmalines. (E) I. I. Plyusnina, B. G. Granadchikova, and I. E. Voskresenskaya. 14, 370 (1969) [14, 450 (1969)]

GRECHUSHNIKOV, B. N.
Optical Activity of Crystals in Directions Different from that of the Optic Axis. I. Uniaxial Crystals. (E) A. F. Konstantinova, N. R. Ivanov, and B. N. Grechushnikov. 14, 222 (1969) [14, 283 (1969)]
Employment of the Principal Orientations of Crystals with Rhombic Symmetry in Calculating EPR Spectral Constants. (E) B. N. Grechushnikov and V. F. Koryagin. 14, 791 (1970) [14, 917 (1969)]

GRUM-GRZHIMAILO, S. V.
The Absorption Spectrum of Olivine. (E) S. V. Grum-Grzhimailo, O. N. Boksha, and T. M. Varina. 14, 272 (1969) [14, 339 (1969)]

GUSAKOVA, L. A.
Textures of Cholesterol-Type Liquid Crystals. (E) I. G. Chistyakov and L. A. Gusakova. 14, 132 (1969) [14, 153 (1969)]

GUSEINOV, G. G.
Determination of the Crystal Structures of Several Three-Component Semiconductors with the General Formula ABX_2. (E) A. S. Avilov, K. A. Agaev, G. G. Guseinov, and R. M. Imamov. 14, 364 (1969) [14, 443 (1969)]

GUSEV, E. B.
Effect of Small Doses of Neutron Irradiation on the Range of the Leading Dislocations of a Star of Etch Figures in Alkali Halide Crystals. (E) E. B. Gusev, I. B. Berman, and M. P. Shaskol'skaya. 14, 117 (1969) [14, 139 (1969)]

GUSEV, V. M.
The Amorphization of Silicon Crystals on Irradiation with Fast Ions. (E) V. M. Gusev, Yu. V. Martynenko, and K. V. Starinin. 14, 908 (1970) [14, 1050 (1969)]

GUSEVA, L. N.
Anisotropy of Light Scattering at Microscopic Defects in Artifical Quartz. (E) N. M. Melankholin, E. V. Antonov, L. N. Guseva, L. A. Gordienko, and V. E. Khadzhi. 14, 376 (1969) [14, 456 (1969)]

HARTMANN, É.
Influence of Cation Impurities on the Growth of Filamentary NaCl Crystals from the Solution. (E/T) É. Hartmann. 14, 986 (1970) [14, 1120 (1969)]

IGNAT'EV, V. V.
Certain Characteristics of the Crystallization of a Molten Drop. (E) G. A. Kurov, A. I. Petrin, and V. V. Ignat'ev. 14, 122 (1969) [14, 144 (1969)]

ILYUKHIN, V. V.
Use of the Mössbauer Effect to Study the Distribution of Fe and Sn Impurity Atoms in Vanadium Pentoxide. (E) A. A. Abdullaev, L. M. Belyaev, T. V. Dmitrieva, G. F. Dobrzhanskii, V. V. Ilyukhin, and I. S. Lyubutin. 14, 389 (1969) [14, 473 (1969)]
Hydrothermal Crystallization in the System $A_2O-TR_2O_3-SiO_2-H_2O$. I. Synthesis of Crystals of Alkali Metal Yttrium Silicates. (E) B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov. 14, 407 (1969) [14, 498 (1969)]
Hydrothermal Crystallization in the $A_2O-TR_2O_3-SiO_2-H_2O$ System. II. Synthesis of Sc-Silicates of Alkali Elements. (E) B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov. 14, 447 (1969) [14, 534 (1969)]
Close and Closest Packings from Quasi-Spherical Particles. (T) Yu. A. Kharitonov, É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 682 (1970) [14, 788 (1969)]
Linear Peak Triplets in Vector Systems Corresponding to Centrosymmetric and Acentric Fundamental Systems. (T) É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 916 (1970) [14, 1059 (1969)]

IMAMOV, R. M.
The Structure of Selenium. (E) A. S. Avilov and R. M. Imamov. 14, 259 (1969) [14, 330 (1969)]
On the Cubic Structure of δ-Bi_2O_3. (E) A. A. Zav'yalova and R. M. Imamov. 14, 261 (1969) [14, 331 (1969)]
On the Orientations in Thin Films of Bismuth and Its Oxide. (E) A. A. Zav'yalova and R. M. Imamov. 14, 305 (1969) [14, 369 (1969)]
Determination of the Crystal Structures of Several Three-Component Semiconductors with the General Formula ABX_2. (E) A. S. Avilov, K. A. Agaev, G. G. Guseinov, and R. M. Imamov. 14, 364 (1969) [14, 443 (1969)]
Electron-Diffraction Analysis of $PbTe-Bi_2Te_3$ System Phases. (E) I. I. Petrov and R. M. Imamov. 14, 593 (1970) [14, 699 (1969)]
Phases in the System $PbTe-Bi_2Te_3$ and Their Atomic Structures. (E) B. K. Vainshtein, R. M. Imamov, and A. G. Talybov. 14, 597 (1970) [14, 703 (1969)]
The Crystal Structure of Palladium Telluride $Pd_{4-x}Te$. (E) V. S. Khar'kin, R. M. Imamov, and S. A. Semiletov. 14, 779 (1970) [14, 907 (1969)]

INDENBAUM, G. V.
Structural Transformations in Synthetic MoS_2. (E) A. N. Zelikman, G. V. Indenbaum, M. V. Teslitskaya, and V. P. Shalankova. 14, 687 (1970) [14, 795 (1969)]

INDENBOM, V. L.
Interaction of Nonparallel Dislocations in an Anisotropic Medium. (T) S. S. Orlov and V. L. Indenbom. 14, 675 (1970) [14, 780 (1969)]

IOSILEVSKII, Ya. A.
Normal Modes of a Crystal Lattice with a Two-Dimensional Defect. (T) Ya. A. Iosilevskii. 14, 160 (1969) [14, 201 (1969)]
Two-Dimensional Green's Functions for Simple Lattices. (T) Ya. A. Iosilevskii. 14, 489 (1970) [14, 577 (1969)]
On the Normal Vibrations of a Crystal Lattice with a Linear Defect. I. (T) Ya. A. Iosilevskii. 14, 842 (1970) [14, 969 (1969)]

ISMAILZADE, I. G.
High-Temperature X-Ray and Dielectric Investigation of Bi_2WO_6. (E) I. G. Ismailzade and F. A. Mirishli. 14, 636 (1970) [14, 738 (1969)]
Synthesis, Dielectric, and X-Ray Investigation of Some New Lamellar Ferroelectrics of the (A $Bi)Bi_4Ti_4FeO_{18}$ (A = Ca, Sr, Pb, Ba) Type. (E) F. A. Mirishli and I. G. Ismailzade. 14, 809 (1970) [14, 933 (1969)]

ITSKOVSKII, M. A.
Investigation of the Infrared Absorption Spectra of a Triglycinsulfate Crystal in Polarized Light during the Ferroelectric Phase Transition. (E) G. S. Danil'chuk, M. A. Itskovskii, and I. S. Kremenchugskii. 14, 866 (1970) [14, 998 (1969)]

IVANOV, N. R.
Optical Activity of Crystals in Directions Different from that of the Optic Axis. I. Uniaxial Crystals. (E) A. F. Konstantinova, N. R. Ivanov, and B. N. Grechushnikov. 14, 222 (1969) [14, 283 (1969)]
New Crystals Belonging to the Family of Alkali Trihydroselenites, the Ferroelectric $RbH_3(SeO_3)_2$ and the Linear Dielectric $NH_4H_3(SeO_3)_2$. (E) L. A. Shuvalov, N. R. Ivanov, N. V. Gordeva, and L. F. Kirpichnikova. 14, 554 (1970) [14, 658 (1969)]

IVANOV, V. V.
Effect of Illumination on Polarization Reversal in the Ferroelectric Semiconductor SbSI Using the Barkhausen Effect. (E) A. A. Bogomolov, V. V. Ivanov, and V. M. Rudyak. 14, 894 (1970) [14, 1033 (1969)]

IVANOVA, L. I.
Possible Hydrothermal Synthesis of In_2O_3 Crystals. (E) B. N. Litvin and L. I. Ivanova. 14, 988 (1970) [14, 1122 (1969)]

JOSHI, M. S.
Hydrothermal Etching of Matched Fractured Prism Faces of Quartz. (E) M. S. Joshi and P. N. Kotru. 14, 427 (1969) [14, 516 (1969)]

KADYSHEVICH, E. A.
The Optical Activity of α-Quartz Irradiated by Fast Neutrons. (E) V. G. Zubov, E. A. Kadyshevich, L. P. Osipova, and A. P. Shtyrkova. 14, 535 (1970) [14, 634 (1969)]

KAGAN, A. S.
Experimental Study of the Effect of Texture on the Form of Diffraction Lines. (E) A. S. Kagan and S. M. Prokoshina. 14, 429 (1969) [14, 518 (1969)]

KALININ, V. P.
Neutron Diffraction Study of Zirconium Carbohydride. (E) V. N. Bykov, V. S. Golovkin, V. P. Kalinin, V. A. Levdik, and V. I. Shcherbak. 14, 785 (1970) [14, 913 (1969)]

KALITINA, M. P.
Electrooptical Properties of Tetramethylammonium Triiodomercurate (II) Crystals. (E) A. S. Sonin, A. S. Vasilevskaya, M. P. Kalitina, and E. I. Marchenko. 14, 275 (1969) [14, 343 (1969)]

KAMINSKII, A. A.
Yttrium Aluminate Containing TR^{3+} Ions as an Active Medium for Lasers. (E) Kh. S. Bagdasarov, G. A. Bogomolova, A. A. Kaminskii, A. M. Kevorkov, and G. I. Rogov. 14, 423 (1969) [14, 513 (1969)]
Laser Emission from CaF_2-YF_3 Crystals Containing Ho^{3+} and Er^{3+}. (E) M. V. Dmitruk and A. A. Kaminskii. 14, 620 (1970) [14, 722 (1969)]
A Laser Based on $SrF_2-YF_3-Nd^{3+}$ Crystals. (E) L. S. Garashina, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 799 (1970) [14, 925 (1969)]

KAMYSHEVA, L. N.
The Effect of a Strong Electric Field on the Dielectric Properties of KD_2PO_4. (E/T) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, and L. A. Bespamyatnova. 14, 141 (1969) [14, 162 (1969)]
Dielectric Properties of KDP Crystals Containing Additions of Chromium. (E) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, I. V. Gavrilova, A. N. Kovalenko, S. G. Savvinova, and A. M. Savvinov. 14, 816 (1970) [14, 940 (1969)]

KAPUSTIN, A. P.
Phase Conversions in Liquid Crystals of the Homologs of Dialkoxyazoxybenzene. (E/T) A. P. Kapustin and L. I. Mart'yanova. 14, 394 (1969) [14, 480 (1969)]
Domain Structure of Liquid Crystals. (E) L. K. Vistin' and A. P. Kapustin. 14, 638 (1970) [14, 740 (1969)]
The Elastic Vibrations of Liquid Crystals of the Nematic Type. (E) A. P. Kapustin. 14, 819 (1970) [14, 943 (1969)]

KARABINSKAYA, V. V.
Crystal Orientation in Lead Sulfide Films Vacuum-Deposited on Muscovite. (E) S. A. Semiletov, R. V. Kudryavtseva, V. N. Pogodina, and V. V. Karabinskaya. 14, 402 (1969) [14, 491 (1969)]

KARAUL'NIK, A. E.
The Spectral Characteristic of Vibrating Crystals as a Function of the Direction of the Exciting Electric Field. (T) A. E. Karaul'nik and V. Shin. 14, 65 (1969) [14, 84 (1969)]

KASHAEV, A. A.
Tazheranite—A Mineral with CaF_2-Type Structure. (E) A. A. Kashaev and Z. F. Ushchapovskaya. 14, 922 (1970) [14, 1064 (1969)]

KATSNEL'SON, A. A.
Calculation of the Size Effect for Polycrystalline Aggregates on the Basis of a Microscopic Theory. (T) A. A. Katsnel'son. 14, 32 (1969) [14, 44 (1969)]
Three-Beam Borrmann Effect in Germanium. (E) A. A. Katsnel'son, V. I. Kisin, and N. A. Polyakova. 14, 839 (1970) [14, 965 (1969)]

KATYSHEV, A. N.
Investigation of the Electron Paramagnetic Resonance of Nd^{3+} in CeO_2. (E) R. Yu. Abdulsabirov, Z. N. Zonn, and A. N. Katyshev. 14, 793 (1970) [14, 919 (1969)]

KAZINETS, M. M.
On the Structure of Certain Phases in the Copper-Sulfur System. (E) M. M. Kazinets. 14, 599 (1970) [14, 704 (1969)]

KEVORKOV, A. M.
Yttrium Aluminate Containing TR^{3+} Ions as an Active Medium for Lasers. (E) Kh. S. Bagdasarov, G. A. Bogomolova, A. A. Kaminskii, A. M. Kevorkov, and G. I. Rogov. 14, 423 (1969) [14, 513 (1969)]

KHACHATURYAN, A. G.
Theory of Order–Disorder Phase Transitions in Molecular Crystals. II. (T) D. A. Badalyan, A. G. Khachaturyan, and A. I. Kitaigorodskii. 14, 333 (1969) [14, 404 (1969)]

KHADZHI, V. E.
Anisotropy of Light Scattering at Microscopic Defects in Artificial Quartz. (E) N. M. Melankholin, E. V. Antonov, I. N. Guseva, L. A. Gordienko, and V. E. Khadzhi. 14, 376 (1969) [14, 456 (1969)]
Hydrothermal Growth of Large Dislocation-Free Crystals of Quartz. (E) L. A. Gordienko, V. F. Miuskov, V. E. Khadzhi, and L. I. Tsinober. 14, 454 (1969) [14, 539 (1969)]

KHARCHENKO, L. Yu.
Hydrothermal Synthesis in Certain Chloride Systems Containing Paraseodymium and Tungsten Oxides. (E) L. Yu. Kharchenko and P. V. Klevtsov. 14, 983 (1970) [14, 1117 (1969)]

KHARITONOV, Yu. A.
Close and Closest Packings from Quasi-Spherical Particles. (T) Yu. A. Kharitonov, É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 682 (1970) [14, 788 (1969)]
The Crystal Structure of Palladium Telluride $Pd_{4-x}Te$. (E) V. S. Khar'kin, R. M. Imamov, and S. A. Semiletov. 14, 779 (1970) [14, 907 (1969)]

KHARTMANN, E.
Plasticity of Fiber Crystals Grown by Different Methods. (E) E. Khartmann, V. N. Rozhanskii, and A. P. Kruzhilina. 14, 828 (1970) [14, 951 (1969)]

KHEIKER, D. M.
Geometry of Measurements of the Integral Intensity for Single Crystals in Diffractometers by Inclined Exposure Schemes. (T) D. M. Kheiker, L. V. Gorbatyi, and É. L. Lube. 14, 196 (1969) [14, 251 (1969)]
Refinement of the Atomic Structure of Baotite and the Isomorphic Relationships in this Mineral. (E) Yu. V. Nekrasov, V. I. Ponomarev, V. I. Simonov, and D. M. Kheiker. 14, 508 (1970) [14, 602 (1969)]

KHITROVA, V. I.
Structure of Potassium, Rubidium, and Cesium Nickelates of Composition Me_xNiO_2. (E) P. N. Bityutskii and V. I. Khitrova. 14, 99 (1969) [14, 122 (1969)]

KHODZHAEVA, V. L.
Infrared Dichroism Study of Liquid Crystals of n-Alkoxybenzoic Acids. (E) M. M. Kusakov, V. L. Khodzhaeva, M. V. Shiskhkina, and I. I. Konstantinov. 14, 398 (1969) [14, 485 (1969)]

KIOSSE, G. A.
Use of the Method of Superposition for Solving Conditional (Weighted) Projections of the Patterson Function. (T) G. A. Kiosse and N. V. Belov. 14, 5 (1969) [14, 9 (1969)]

KIRGINTSEV, A. N.
Effect of Rotation of the Face Paths during Growth of Germanium Single Crystals. (E) A. N. Kirgintsev and Yu. A. Rybin. 14, 831 (1970) [14, 954 (1969)]

KIRILYUK, N. F.
Slip Elements and Dislocation Reactions in Ammonium Dihydrophosphate Crystals. (E) N. A. Pasternak, Yu. M. Fishman, N. F. Kirilyuk, and A. A. Predvoditelev. 14, 243 (1969) [14, 310 (1969)]

KIRPICHNIKOVA, L. F.
New Crystals Belonging to the Family of Alkali Trihydroselenites, the Ferroelectric $RbH_3(SeO_3)_2$ and the Linear Dielectric $NH_4H_3(SeO_3)_2$. (E) L. A. Shuvalov, N. R. Ivanov, N. V. Gordeva, and L. F. Kirpichnikova. 14, 554 (1970) [14, 658 (1969)]

KISIN, V. I.
Three-Beam Borrmann Effect in Germanium. (E) A. A. Kantsel'son, V. I. Kisin, and N. A. Polyakova. 14, 839 (1970) [14, 965 (1969)]

KITAIGORODSKII, A. I.
Theory of Order–Disorder Phase Transitions in Molecular Crystals. II. (T) D. A. Badalyan, A. G. Khachaturyan, and A. I. Kitaigorodskii. 14, 333 (1969) [14, 404 (1969)]
Calculation of the Spectrum of Small Vibrations and Characteristic Temperature of Crystalline Naphthalene. (T) A. I. Kitaigorodskii and É. I. Mukhtarov. 14, 678 (1970) [14, 784 (1969)]

Interactions of the C...O... and O...O Atoms in CO_2 Crystals. (E) A. I. Kitaigorodskii, K. V. Mirskaya, and V. V. Nauchitel'. 14, 769 (1970) [14, 900 (1969)]

KIZEL', V. A.
The Optical Activity of Bismuth Compounds. (E) V. N. Batog, V. I. Burkov, V. A. Kizel', V. A. Madii, G. M. Safronov, and V. M. Skorikov. 14, 803 (1970) [14, 928 (1969)]

KLESHCHEV, G. V.
Graphical Construction of Diffuse-Scattering Regions. (E) G. V. Kleshchev, D. V. Shumilov, A. I. Sheinkman, and V. N. Panov. 14, 948 (1970) [14, 1088 (1969)]

KLEVTSOV, P. V.
Hydrothermal Synthesis in Certain Chloride Systems Containing Paraseodymium and Tungsten Oxides. (E) L. Yu. Kharchenko and P. V. Klevtsov. 14, 983 (1970) [14, 1117 (1969)]

KLEVTSOVA, R. F.
Features of the Crystal Structure of $Li_3Fe[WO_4]_2$. (E) R. F. Klevtsova and S. V. Borisov. 14, 515 (1970) [14, 610 (1969)]
The Crystal Structure of $NdWO_4OH$. (E) R. F. Klevtsova and S. V. Borisov. 14, 776 (1970) [14, 904 (1969)]

KLIENTOVA, G. P.
Hydrothermal Synthesis of $KZnF_3$ Single Crystals with a Perovskite Structure. (E) M. M. Lukina and G. P. Klientova. 14, 314 (1969) [14, 377 (1969)]
Synthesis and Properties of Mullite. (E) R. L. Dunin-Barkovskii, G. P. Klientova, and E. E. Lisitsyna. 14, 651 (1970) [14, 750 (1969)]

KLIMASENKO, N. L.
Crystal and Molecular Structure of α-Br-Anthraquinone. (E) N. K. Klimasenko, G. A. Gol'der, and G. S. Zhdanov. 14, 207 (1969) [14, 266 (1969)]
Crystal and Molecular Structure of α-Chloroanthraquinone. (E) N. L. Klimasenko and G. A. Gol'der. 14, 586 (1970) [14, 694 (1969)]

KOCHERGINA, A. A.
Filamentary Diamond Crystals. (E) B. V. Deryagin, L. L. Builov, V. M. Zubkov, A. A. Kochergina, and D. V. Fedoseev. 14, 449 (1969) [14, 535 (1969)]

KOGNOVITSKAYA, N. A.
Crystal Structure of Solid Solutions in the ZnSe–CdSe System. (E) K. V. Shalimova, A. F. Botnev, V. A. Dmitriev, N. Z. Kognovitskaya, and V. V. Starostin. 14, 531 (1970) [14, 629 (1969)]

KOKAROVTSEVA, I. G.
The Crystal Structure of Barium Iron (IV) Oxides in the System $BaFeO_3$–$BaFeO_{2.5}$. (E) I. N. Belyaev, E. G. Fesenko, V. S. Filip'ev, and I. G. Kokarovtseva. 14, 782 (1970) [14, 910 (1969)]

KOLONTSOVA, E. V.
Some Effects Associated with Compton Scattering in Single Crystals. (E) I. V. Telegina and E. V. Kolontsova. 14, 603 (1970) [14, 707 (1969)]
The Defect Structure of γ- and X-Irradiated Alkali Halide Crystals. (E) E. V. Kolontsova and V. M. Linnik. 14, 903 (1970) [14, 1044 (1969)]

KOLPAKOV, A. V.
Crystal Structure Determination Using the Q Function. (T) A. V. Kolpakov and R. N. Kuz'min. 14, 504 (1970) [14, 597 (1969)]

KON, A. Yu.
Effect of an Electrostatic Field on the Kinetics of Selenium Crystallization from the Gas Phase. (E) G. B. Abdullaev, A. I. Odobesku, and A. Yu. Kon. 14, 972 (1970) [14, 1108 (1969)]

KON'KOVA, T. S.
Solubility and Crystallization of Yttrium and Rare-Earth Orthovandates. (E) V. A. Timofeeva, V. I. Popov, and T. S. Kon'kova. 14, 128 (1969)] [14, 150 (1969)]

KONSTANTINOV, I. I.
Infrared Dichroism Study of Liquid Crystals of n-Alkoxybenzoic Acids. (E) M. M. Kusakov, V. L. Khodzhaeva, M. V. Shiskhkina, and I. I. Konstantinov. 14, 398 (1969) [14, 485 (1969)]

KONSTANTINOVA, A. F.
Optical Activity of Crystals in Directions Different from that of the Optic Axis. I. Uniaxial Crystals. (E) A. F. Konstantinova, N. R. Ivanov, and B. N. Grechushnikov. 14, 222 (1969) [14, 283 (1969)]

KONSTANTINOVA, V. P.
Visualization of the Domain Structure of Crystals of Triglycine Sulfate at the Electron-Microscopic Level. (E) G. I. Distler, V. P. Konstantinova, and V. P. Vlasov. 14, 70 (1969) [14, 90 (1969)]

KOPELIOVICH, E. S.
On the Nature of "Growth Bands" in Epitaxial Layers of GaP_xAs_{1-x}. (T) F. A. Gimel'farb, E. S. Kopeliovich, V. N. Maslov, R. L. Petrusevich, and V. I. Fistul'. 14, 967 (1970) [14, 1104

KORYAGIN, V. F.
Employment of the Principal Orientations of Crystals with Rhombic Symmetry in Calculating EPR Spectral Constants. (E) B. N. Grechushnikov and V. F. Koryagin. 14, 791 (1970) [14, 917 (1969)]

KOSEVICH, V. M.
The Effect of Impurities in Ionic Crystals on the Epitaxy of Gold. (E) A. A. Sokol and V. M. Kosevich. 14, 438 (1969) [14, 527 (1969)]

KOSTERIN, E. A.
X-Ray Analysis of the Structure of Para-Azoxyanisole in an Alternating Electric Field. (E) E. A. Kosterin and I. G. Chistyakov. 14, 252 (1969) [14, 321 (1969)]
Effect of Temperature on the Texture of Nematic Paraazoxyanisole Oriented by an Electric Field. (E) E. A. Kosterin. 14, 435 (1969) [14, 524 (1969)]

KOTELYANSKII, I. M.
Production of Epitaxial CdS Films by Gas Transport Reactions. (E) S. A. Aitkhozhin, I. M. Kotelyanskii, G. B. Bokii, V. F. Dvoryankin, G. G. Dvoryankina, and V. V. Panteleev. 14, 309 (1969) [14, 373 (1969)]

KOTRU, P. N.
Hydrothermal Etching of Matched Fractured Prism Faces of Quartz. (E) M. S. Joshi and P. N. Kotru. 14, 427 (1969) [14, 516 (1969)]

KOVALENKO, A. N.
Dielectric Properties of KDP Crystals Containing Additions of Chromium. (E) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, I. V. Gavrilova, A. N. Kovalenko, S. G. Savvinova, and A. M. Savvinov. 14, 816 (1970) [14, 940 (1969)]

KOVRIGIN, V. I.
Growth of Nickel–Germanium Alloy Single Crystals from the Melt. (E) N. I. Sudakov, V. I. Kovrigin, and B. A. Ayurzanain. 14, 316 (1969) [14, 379 (1969)]

KOZHIN, V. M.
Temperature Dependence of the Unit Cell Parameters of Aluminum Methyl Ammonium Sulfate in Phases I and II. (E) V. M. Kozhin and M. P. Zaitseva. 14, 277 (1969) [14, 344 (1969)]
Changes in Density between Carbon Tetrachloride Phases. (E) V. M. Kozhin. 14, 630 (1970) [14, 732 (1969)]
Study of the Thermal Expansion of Molecular Crystals. 3. Determination of the Unit Cell Parameters and Anisotropy in the Thermal Expansion of Biphenyl at Low Temperatures. (T/E) V. M. Kozhin and K. V. Mirskoya. 14, 938 (1970) [14, 1077 (1969)]

KOZLOVA, I. E.
Calculation of the Structure and Lattice-Energy Surface of Naphthalene and Anthracene Crystals. (T) K. V. Mirskaya and I. E. Kozlova. 14, 339 (1969) [14, 412 (1969)]

KOZLOVSKII, V. Kh.
Successive Transitions in a Potassium Ferrocyanide Crystal. (T) V. Kh. Kozlovskii. 14, 138 (1969) [14, 159 (1969)]

KRAMAROV, O. P.
Single Crystals of Cadmium Metatitanate and Solid Solutions Based on It. (E) M. L. Sholokhovich, O. P. Kramarov, B. F. Proskuryakov, and E. K. Zvorykina. 14, 884 (1970) [14, 1021 (1969)]

KRASNIKOVA, A. Ya.
The Dielectric Dispersion of Crystals of Potassium Ferrocyanide. (E) V. M. Petrov, A. Ya. Krasnikova, and E. S. Yashumova. 14, 811 (1970) [14, 935 (1969)]

KREMENCHUGSKII, I. S.
Investigation of the Infrared Absorption Spectra of a Triglycinsulfate Crystal in Polarized Light during the Ferroelectric Phase Transition. (E) G. S. Danil'chuk, M. A. Iskovskii, and I. S. Kremenchugskii. 14, 866 (1970) [14, 998 (1969)]

KRUZHILINA, A. P.
Plasticity of Fiber Crystals Grown by Different Methods. (E) E. Khartmann, V. N. Rozhanskii, and A. P. Kruzhilina. 14, 828 (1970) [14, 951 (1969)]

KUDRYAVTSEVA, R. V.
Crystal Orientation in Lead Sulfide Films Vacuum-Deposited on Muscovite. (E) S. A. Semiletov, R. V. Kudryavtseva, V. N. Pogodina, and V. V. Karabinskaya. 14, 402 (1969) [14, 491 (1969)]

KUGAENKO, O. M.
Slip Lines in CdS after Plastic Deformation. (E) A. A. Blistanov, O. M. Kugaenko, V. V. Geras'kin, and M. P. Shaskol'skaya. 14, 941 (1970) [14, 1080 (1969)]

KURBATOV, B. S.
Some Characteristics of the Etching of Germanium with Iodine Vapor. (E) B. S. Kurbatov and G. A. Kurov. 14, 286 (1969) [14, 352 (1969)]

KUROV, G. A.
Certain Characteristics of the Crystallization of a Molten Drop. (E) G. A. Kurov, A. I. Petrin, and V. V. Ignat'ev. 14, 122 (1969) [14, 144 (1969)]
Some Characteristics of the Etching of Germanium with Iodine Vapor. (E) B. S. Kurbatov and G. A. Kurov. 14, 286 (1969) [14, 352 (1969)]

KUSAKOV, M. M.
Infrared Dichroism Study of Liquid Crystals of n-Alkoxybenzoic Acids. (E) M. M. Kusakov, V. L. Khodzhaeva, M. V. Shiskhkina, and I. I. Konstantinov. 14, 398 (1969) [14, 485 (1969)]

KUZ'MIN, É. A.
Close and Closest Packings from Quasi-Spherical Particles. (T) Yu. A. Kharitonov, É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 682 (1970) [14, 788 (1969)]
Linear Peak Triplets in Vector Systems Corresponding to Centrosymmetric and Acentric Fundamental Systems. (T) É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 916 (1970) [14, 1059 (1969)]

KUZ'MIN, R. N.
Crystal Structure Determination Using the Q Function. (T) A. V. Kolpakov and R. N. Kuz'min. 14, 504 (1970) [14, 597 (1969)]
Use of the Mössbauer Effect in Determining the Magnetic Structure of Crystals. (T) M. A. Andreeva and R. N. Kuz'min. 14, 605 (1970) [14, 708 (1969)]

KUZ'MINOV, Yu. S.
Preparation and Physicochemical Properties of the Compounds $Bi_{12}GeO_{20}$ and $Bi_4(GeO_4)_3$. (E) Yu. S. Kuz'minov, M. G. Lifshits, and V. D. Salnikov. 14, 297 (1969) [14, 363 (1969)]
The Magnetic Extinction of Neutrons by Polycrystalline Aggregates. (T/E) Yu. S. Kuz'minov. 14, 111 (1969) [14, 134 (1969)]

KUZNETSOV, V. A.
Kinetics of the Hydrothermal Crystallization of Quartz in Different Solutions and the Adsorption Film Hypothesis. (T/E) A. A. Chernov and V. A. Kuznetsov. 14, 753 (1970) [14, 879 (1969)]

KUZNETSOV, V. G.
The Space Charges and Electrical Properties of Single Crystals of Barium Titanate. (E) V. Z. Borodin, S. G. Gakh, M. I. Gorelov, and V. G. Kuznetsov. 14, 805 (1970) [14, 929 (1969)]

KUZNETSOV, V. P.
Various Properties of Epitaxial Films of Si Obtained by Sublimation in Vacuum from Sources Doped with As and P. (E) V. P. Kuznetsov and V. V. Postnikov. 14, 441 (1969) [14, 529 (1969)]

LAINER, B. D.
Distribution of Volatile Impurities Ahead of the Crystallization Front in a Melt. (T) B. D. Lainer, V. V. Voronkov, M. G. Mil'vidskii, and V. V. Rakov. 14, 451 (1969) [14, 537 (1969)]
Crystallization of Nonstoichiometric Melts of Decomposable Compounds. (T/E) B. D. Lainer, A. V. Berkova, M. G. Mil'vidskii, and V. V. Rakov. 14, 743 (1970) [14, 867 (1969)]

LANDAU, A. I.
Statistical Investigation of the Distribution of the Distances between Pinning Points of Dislocations. (E/T) A. I. Landau, V. N. Borzhkovskaya, M. T. Torkatyuk, and M. A. Davydova. 14, 238 (1969) [14, 303 (1969)]

LASHKO, N. F.
Transformation of Nonequilibrium Dendrite Shapes in the Growth of the ZnZr Phase in Cast Alloys of the Mg–Zn–Zr System. (E) N. F. Lashko and G. I. Morozova. 14, 143 (1969) [14, 163 (1969)]

LEBEDEV, V. M.
Investigation of the $CdTiO_3$–$NaTaO_3$ and $CdTiO_3$–$BiFeO_3$ Systems. (E) V. M. Lebedev, Yu. N. Venevtsev, and G. S. Zhdanov. 14, 931 (1970) [14, 1071 (1969)]

LEBEDEVA, V. N.
Investigation of Color Centers in Alkali Halide Crystals at the Electron Microscopic Level. (E) G. I. Distler, V. N. Lebedeva, and V. V. Moskvin. 14, 559 (1970) [14, 664 (1969)]

LEIBOVICH, T. I.
Nuclear Magnetic Resonance Investigation of the Ferroelectric Transition in $(NH_4)_2BeF_4$. I. Magnetic Shielding of the F^{19} Nuclei. (E) I. P. Aleksandrova, L. I. Zherebtsova, and T. I. Leibovich. 14, 218 (1969) [14, 279 (1969)]

LEVDIK, V. A.
Neutron Diffraction Study of Zirconium Carbohydride. (E) V. N. Bykov, V. S. Golovkin, V. P. Kalinin, V. A. Levdik, and V. I. Shcherbak. 14, 785 (1970) [14, 913 (1969)]

LEVINA, I. M.
Growth Rate of Rochelle Salt Crystals As a Function of Solution Supersaturation. (E) I. M. Levina and A. V. Belyustin. 14, 954 (1970) [14, 1093 (1969)]

LI, L.
A Laser Based on SrF_2–YF_3–Nd^{3+} Crystals. (E) L. S. Garashina, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 799 (1970) [14, 925 (1969)]

LIFSHITS, M. G.
Preparation and Physicochemical Properties of the Compounds $Bi_{12}GeO_{20}$ and $Bi_4(GeO_4)_3$. (E) Yu. S. Kuz'minov, M. G. Lifshits, and V. D. Salnikov. 14, 297 (1969) [14, 363 (1969)]

LIKHACHEVA, Yu. S.
Electrical Polarization of Crystals during Torsional Deformation. (E/T) I. S. Zheludev, Yu. S. Likhacheva, and N. A. Lileeva. 14, 425 (1969) [14, 514 (1969)]

LILEEVA, N. A.
Electrical Polarization of Crystals during Torsional Deformation. (E/T) I. S. Zheludev, Yu. S. Likhacheva, and N. A. Lileeva. 14, 425 (1969) [14, 514 (1969)]

LINNIK, V. M.
The Defect Structure of γ- and X-Irradiated Alkali Halide Crystals. (E) E. V. Kolontsova and V. M. Linnik. 14, 903 (1970) [14, 1044 (1969)]

LISITSYNA, E. E.
Synthesis and Properties of Mullite. (E) R. L. Dunin-Barkovskii, G. P. Klientova, and E. E. Lisitsyna. 14, 651 (1970) [14, 750 (1969)]

LITVIN, B. N.
Crystallization in the Na_2O–Al_2O_3–SiO_2–H_2O System. (E) B. N. Litvin and O. K. Mel'nikov. 14, 79 (1969) [14, 101 (1969)]
Synthetic Series of Sodium Rare-Earth Silicates and Germanates. (E) A. V. Chichagov, B. N. Litvin, and N. V. Belov. 14, 95 (1969) [14, 119 (1969)]

Hydrothermal Crystallization in the System $A_2O-TR_2O_3-SiO_2-H_2O$. I. Synthesis of Crystals of Alkali Metal Yttrium Silicates. (E) B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov. 14, 407 (1969) [14, 498 (1969)]

Hydrothermal Crystallization in the $A_2O-TR_2O_3-SiO_2-H_2O$ System. II. Synthesis of Sc-Silicates of Alkali Elements. (E) B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov. 14, 447 (1969) [14, 534 (1969)]

Possible Hydrothermal Synthesis of In_2O_3 Crystals. (E) B. N. Litvin and L. I. Ivanova. 14, 988 (1970) [14, 1122 (1969)]

LIU, T. F.

The Thermal Expansion of Potassium Dihydrogen Phosphate in the Vicinity of the Ferroelectric Phase Transition. (E) A. A. Boiko and Liu Tan Fat. 14, 712 (1970) [14, 825 (1969)]

LOTFULIN, P. Sh.

Effect of Torsional Oscillations and Hindered Molecular Rotation on the Spin-Lattice Relaxation Time of Nuclear Quadrupole Resonance in Molecular Crystals. (T) P. Sh. Lotfulin and G. K. Semin. 14, 700 (1970) [14, 809 (1969)]

LUBE, É. L.

Geometry of Measurements of the Integral Intensity for Single Crystals in Diffractometers by Inclined Exposure Schemes. (T) D. M. Kheiker, L. V. Gorbatyi, and É. L. Lube. 14, 196 (1969) [14, 251 (1969)]

LUKINA, M. M.

Hydrothermal Synthesis of $KZnF_3$ Single Crystals with a Perovskite Structure. (E) M. M. Lukina and G. P. Klientova. 14, 314 (1969) [14, 377 (1969)]

LUK'YANOVA, N. I.

Solubility and Crystallization of Yttrium-Iron Garnet in Melts. (E) V. A. Timofeeva and N. I. Luk'yanova. 14, 757 (1970) [14, 884 (1969)]

LUNDIN, A. G.

Determination of the Parameters of the Orientational Dependence of the Second Moment in Structural Investigations by the Nuclear Magnetic Resonance Method. (E/T) O. V. Falaleev, L. G. Falaleeva, and A. G. Lundin. 14, 45 (1969) [14, 59 (1969)]

LYUBIMOV, V. N.

Magnetoelectric Effect and Irreversible Light Propagation in Crystals. (T) V. N. Lyubimov. 14, 168 (1969) [14, 213 (1969)]

LYUBUTIN, I. S.

Use of the Mössbauer Effect to Study the Distribution of Fe and Sn Impurity Atoms in Vanadium Pentoxide. (E) A. A. Abdullaev, L. M. Belyaev, T. V. Dmitrieva, G. F. Dobrzhanskii, V. V. Ilyukhin, and I. S. Lyubutin. 14, 389 (1969) [14, 473 (1969)]

LYUTTSAU, V. G.

Diffraction Topography by Scanning with a Wide X-Ray Beam. (E) V. G. Lyuttsau and Yu. M. Fishman. 14, 720 (1970) [14, 835 (1969)]

MADII, V. A.

The Optical Activity of Bismuth Compounds. (E) V. N. Batog, V. I. Burkov, V. A. Kizel', V. A. Madii, G. M. Safronov, and V. M. Skorikov. 14, 803 (1970) [14, 928 (1969)]

MAISTRENKO, L. G.

Anisotropy of the Radiative Reinforcement of Zinc Single Crystals. (E) O. A. Troitskii, L. G. Maistrenko, and N. P. Yatsenko. 14, 821 (1970) [14, 944 (1969)]

MAKAROV, V. A.

Crystal Optics of Strontium Vanadates and Phase Diagram of V_2O_5-SrO System. (E) A. A. Fotiev and V. A. Makarov. 14, 621 (1970) [14, 723 (1969)]

MAKAROV, V. P.

X-Ray Topography of the Ferromagnetic Domains of Silicon Iron. (E) V. P. Makarov and B. V. Molotilov. 14, 945 (1970) [14, 1084 (1969)]

MAKSIMOV, B. A.

Hydrothermal Crystallization in the System $A_2O-TR_2O_3-SiO_2-H_2O$. I. Synthesis of Crystals of Alkali Metal Yttrium Silicates. (E) B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov. 14, 407 (1969) [14, 498 (1969)]

Hydrothermal Crystallization in the $A_2O-TR_2O_3-SiO_2-H_2O$ System. II. Synthesis of Sc-Silicates of Alkali Elements. (E) B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov. 14, 447 (1969) [14, 534 (1969)]

MAKSIMOV, S. K.

An Ordered Phase on Quadrupled Repeat Distance on the Basis of a bcc Lattice. (E) Yu. O. Mezhennyi, Yu. A. Skakov, S. K. Maksimov, and V. B. Spiridonov. 14, 601 (1970) [14, 706 (1969)]

MALINOVSKII, T. I.

Crystal Structure of Chloro-Bis-Dimethyl-Ammonium Glyoximate of Cobalt (III). (E) T. I. Malinovskii, Yu. A. Simonov, and B. M. Shchedrin. 14, 863 (1970) [14, 995 (1969)]

MAMEDOV, K. P.

The Atomic Scattering Factor of Germanium. (E) K. P. Mamedov. 14, 113 (1969) [14, 135 (1969)]

MARCHENKO, E. I.

Electrooptical Properties of Tetramethylammonium Triiodomercurate (II) Crystals. (E) A. S. Sonin, A. S. Vasilevskaya, M. P. Kalitina, and E. I. Marchenko. 14, 275 (1969) [14, 343 (1969)]

MARGOLIS, N. V.

Perovskite Type Structures of Aluminate Rare-Earth Elements. (T/E) N. V. Margolis and Yu. P. Udalov. 14, 265 (1969) [14, 334 (1969)]

MARINCHUK, V. K.

Influence of Temperature on the Luminescence and Photoelectret State of Silver Halides. (E) V. K. Marinchuk, V. M. Belous, and V. I. Bugrienko. 14, 880 (1970) [14, 1016 (1969)]

MARKOVA, N. E.

Temperature Changes in the Structure of Barrier Type Anodic Oxide Films on Aluminum. (E) G. I. Galkin, V. V. Chernyshev, and N. E. Markova. 14, 645 (1970) [14, 746 (1969)]

MARKOVSKII, V. Yu.

Piezooptic Constants of LiF, NaF, NaCl, NaI, KCl, KBr, KI, and RbI Single Crystals. (E) S. S. Gorbach, L. A. Deptsova, G. F. Dobrzhanskii, V. Yu. Markovskii, and M. P. Shaskol'skaya. 14, 627 (1970) [14, 729 (1969)]

MART'YANOVA, L. I.

Phase Conversions in Liquid Crystals of the Homologs of Dialkoxyazoxybenzene. (E/T) A. P. Kapustin and L. I. Mart'yanova. 14, 394 (1969) [14, 480 (1969)]

MARTYNENKO, Yu. V.

The Amorphization of Silicon Crystals on Irradiation with Fast Ions. (E) V. M. Gusev, Yu. V. Martynenko, and K. V. Starinin. 14, 908 (1970) [14, 1050 (1969)]

MASLOV, V. N.

On the Nature of "Growth Bands" in Epitaxial Layers of GaP_xAs_{1-x}. (T) F. A. Gimel'farb, E. S. Kopeliovich, V. N. Maslov, R. L. Petrusevich, and V. I. Fistul'. 14, 967 (1970) [14, 1104 (1969)]

MARTIROSYAN, V. O.

Effect of State of Lead Impurity on Mechanical Properties of Potassium Chloride and Sodium Chloride Crystals. (E) O. V. Obukhova, M. M. Tagieva, and M. P. Shaskol'skaya. 14, 825 (1970) [14, 948 (1969)]

MATVEEV, Yu. E.

The Crystallization of Thin Layers of Supercooled Gallium. (E) V. T. Borisov and Yu. E. Matveev. 14, 765 (1970) [14, 895 (1969)]

MATVEEVA, G. S.

On the Mechanism of Selective Etching at Dislocations in Zinc. (E) E. G. Popkova, G. S. Matveeva, and A. A. Predvoditelev. 14, 40 (1969) [14, 53 (1969)]

MAZO, D. M.

Determination of Mean Square Deviation Amplitudes of Atoms of Specific Sublattices in Ferrites with Spinel Structure. (T/E) D. M. Mazo. 14, 105 (1969) [14, 128 (1969)]

MEDVEDEVA, T. I.

Preparation of Germanium Films on Sapphire by Pyrolysis of Hydrides. (E) T. A. Zeveke, T. I. Medvedeva, and N. N. Sheftal'. 14, 649 (1970) [14, 748 (1969)]

MELANKHOLIN, N. M.
The Preparation and Certain Properties of Single-Crystal $LaNbO_4$. (E) L. M. Belyaev, F. I. Dmitrieva, N. M. Melankholin, A. A. Popova, and L. V. Soboleva. 14, 294 (1969) [14, 359 (1969)]
Anisotropy of Light Scattering at Microscopic Defects in Artificial Quartz. (E) N. M. Melankholin, E. V. Antonov, I. N. Guseva, L. A. Gordienko, and V. E. Khadzhi. 14, 376 (1969) [14, 456 (1969)]
MEL'NIKOV, O. K.
Crystallization in the $Na_2O-Al_2O_3-SiO_2-H_2O$ System. (E) B. N. Litvin and O. K. Mel'nikov. 14, 79 (1969) [14, 101 (1969)]
MEL'NIKOVA, A. M.
Charge Separation by Crystallization. (R) A. M. Mel'nikova. 14, 464 (1969) [14, 548 (1969)]
MEN', A. N.
Method of Determining the Contribution of the Defectiveness of the Components to the Overall Defectiveness of Solutions of the MeO-Type from the Changes in Their Crystal-Lattice Parameters. (T/E) M. P. Bogdanovich, Yu. P. Vorob'ev, A. N. Men', and G. I. Chufarov. 14, 570 (1970) [14, 677 (1969)]
MERZHANOV, I. A.
Impurity Distribution during Directed Crystallization. (T) I. A. Merzhanov and A. G. Anikin. 14, 146 (1969) [14, 165 (1969)]
MEZHENNYI, Yu. O.
An Ordered Phase on Quadrupled Repeat Distance on the Basis of a bcc Lattice. (E) Yu. O. Mezhennyi, Yu. A. Skakov, S. K. Maksimov, and V. B. Spiridonov. 14, 601 (1970) [14, 706 (1969)]
MIKHEL'SON, L. M.
Second Order Phase Transitions in Crystals with the Space Group O_h^1. (T) K. S. Aleksandrov, V. I. Zinenko, L. M. Mikhel'son, and Yu. I. Sirotin. 14, 256 (1969) [14, 327 (1969)]
The Role of Crystal Structure Type in the Theory of Second-Order Phase Transitions. (T) L. M. Mikhel'son and Yu. I. Sirotin. 14, 485 (1970) [14, 573 (1969)]
MIKOLAICHUK, A. G.
Structure of Cadmium Sulfide Films Sublimated onto Slid Faces of Single NaCl, KCl, and KBr Faces. (E) A. G. Mikolaichuk, Ya. I. Dutchak, and D. M. Freik. 14, 148 (1969) [14, 167 (1969)]
MILIYANCHUK, M. V.
Production of Thin Films of the α-Modification of Mercury Sulfide. (E) B. F. Bilen'kii, M. V. Miliyanchuk, M. V. Pashkovskii, and I. V. Savitskii. 14, 975 (1970) [14, 1111 (1969)]
MIL'VIDSKII, M. G.
Nature of the Inclusions in Gold-Doped Germanium Single Crystals. (E) V. G. Fomin and M. G. Mil'vidskii. 14, 281 (1969) [14, 348 (1969)]
Distribution of Volatile Impurities Ahead of the Crystallization Front in a Melt. (T) B. D. Lainer, V. V. Voronkov, M. G. Mil'vidskii, and V. V. Rakov. 14, 451 (1969) [14, 537 (1969)]
Crystallization of Nonstoichiometric Melts of Decomposable Compounds. (T/E) B. D. Lainer, A. V. Berkova, M. G. Mil'vidskii, and V. V. Rakov. 14, 743 (1970) [14, 867 (1969)]
Effect of Impurity Evaporation from a Melt on the Transient Period of Impurity Repulsion. (T) V. V. Voronkov, M. G. Mil'vidskii, and O. V. Pelevin. 14, 951 (1970) [14, 1091 (1969)]
MINGAZIN, T. A.
Oriented Crystallization of Vacuum-Deposited Cadmium Sulfide. (E) T. A. Mingazin and E. M. Smirnova. 14, 300 (1969) [14, 366 (1969)]
X-Ray Investigation of Crystallization Processes in Antimony Trisulfide Films. (E) E. M. Smirnova, T. A. Mingazin, and M. N. Odlis. 14, 303 (1969) [14, 367 (1969)]
MIRISHLI, F. A.
High-Temperature X-Ray and Dielectric Investigation of Bi_2WO_6. (E) I. G. Ismailzade and F. A. Mirishli. 14, 636 (1970) [14, 738 (1969)]
Synthesis, Dielectric, and X-Ray Investigation of Some New Lamellar Ferroelectrics of the (A Bi)$Bi_4Ti_4FeO_{18}$ (A = Ca, Sr, Pb, Ba) Type. (E) F. A. Mirishli and I. G. Ismailzade. 14, 809 (1970) [14, 933 (1969)]
MIRSKAYA, K. V.
Calculation of the Structure and Lattice-Energy Surface of Naphthalene and Anthracene Crystals. (T) K. V. Mirskaya and I. E. Kozlova. 14, 339 (1969) [14, 412 (1969)]
Interactions of the C...O... and O...O Atoms in CO_2 Crystals. (E) A. I. Kitaigorodskii, K. V. Mirskaya, and V. V. Nauchitel'. 14, 769 (1970) [14, 900 (1969)]
Study of the Thermal Expansion of Molecular Crystals. 3. Determination of the Unit Cell Parameters and Anisotropy in the Thermal Expansion of Biphenyl at Low Temperatures. (T/E) V. M. Kozhin and K. V. Mirskoya. 14, 938 (1970) [14, 1077 (1969)]
MITYAGIN, A. Yu.
Geometry of the Diffraction Patterns of Slow Electrons Reflected by the Surface of Crystals with a NaCl Lattice Type. (E) I. F. Dvoryankin, A. Yu. Mityagin, and V. P. Orlov. 14, 772 (1970) [14, 902 (1969)]
MIUSKOV, V. F.
Hydrothermal Growth of Large Dislocation-Free Crystals of Quartz. (E) L. A. Gordienko, V. F. Miuskov, V. E. Khadzhi, and L. I. Tsinober. 14, 454 (1969) [14, 539 (1969)]
MOGIL'NIKOVA, T. T.
Multiplication of Dislocations under the Joint Action of Periodic and Increasing Stresses. (E) R. I. Garber and T. T. Mogil'nikova. 14, 115 (1969) [14, 137 (1969)]
MOKIEVSKII, V. A.
Symmetry of Epitaxial Textures. (E) V. A. Mokievskii and Yu. M. Chashchinov. 14, 669 (1970) [14, 773 (1969)]
MOLOTILOV, B. V.
X-Ray Topography of the Ferromagnetic Domains of Silicon Iron. (E) V. P. Makarov and B. V. Molotilov. 14, 945 (1970) [14, 1084 (1969)]
MOROZOVA, G. I.
Transformation of Nonequilibrium Dendrite Shapes in the Growth of the ZnZr Phase in Cast Alloys of the Mg–Zn–Zr System. (E) N. F. Lashko and G. I. Morozova. 14, 143 (1969) [14, 163 (1969)]
MOROZOVA, N. K.
Influence of Point Defects on the Crystalline Structure of Zinc Sulfide Powders. (E) N. K. Morozova, M. M. Veselkova, A. F. Botnev, and K. V. Shalimova. 14, 74 (1969) [14, 95 (1969)]
MOSKVIN, V. V.
Investigation of Color Centers in Alkali Halide Crystals at the Electron Microscopic Level. (E) G. I. Distler, V. N. Lebedeva, and V. V. Moskvin. 14, 559 (1970) [14, 664 (1969)]
MUKHTAROV, É. I.
Calculation of the Spectrum of Small Vibrations and Characteristic Temperature of Crystalline Naphthalene. (T) A. I. Kitaigorodskii and É. I. Mukhtarov. 14, 678 (1970) [14, 784 (1969)]
MURADYAN, L. A.
Minimization of the Divergence Factor of Structures by Application of a Random Search Method. (T) L. A. Muradyan, A. F. Deart, and V. I. Burdina. 14, 501 (1970) [14, 593 (1969)]

NATSVLISHVILI, G. I.
On the Configurations of the Atomic Planes Bordering a Crack. (E) M. Kh. Blekherman and G. I. Natsvlishvili. 14, 284 (1969) [14, 351 (1969)]
NAUCHITEL', V. V.
Interactions of the C...O... and O...O Atoms in CO_2 Crystals. (E) A. I. Kitaigorodskii, K. V. Mirskaya, and V. V. Nauchitel'. 14, 769 (1970) [14, 900 (1969)]
NEKRASOV, Yu. V.
Refinement of the Atomic Structure of Baotite and the Isomorphic Relationships in this Mineral. (E) Yu. V. Nekrasov, V. I. Ponomarev, V. I. Simonov, and D. M. Kheiker. 14, 508 (1970) [14, 602 (1969)]
NENOV, D.
Development of Nonsingular Surfaces on Crystals Growing from the Vapor Phase. (E/T) E. D. Dukova and D. Nenov. 14, 83 (1969) [14, 106 (1969)]

NIKIFOROVA, T. I.
Production and Optical Properties of $Bi_{12}GeO_{20}$ Single Crystals. (E) A. I. Safonov, S. A. Baryshev, T. I. Nikoforova, G. N. Antonov, and S. A. Fedulov. 14, 131 (1969) [14, 152 (1969)]

NIKITICHEV, P. I.
The Microblock Structure of Hydrothermal Crystals of Corundum. (E) V. N. Voitsekhovskii, P. I. Nikitichev, Z. F. Smirnova, and L. N. Furmakova. 14, 733 (1970) [14, 852 (1969)]

NOVÁK, J.
Sound of the Principal Optical and Dielectric Properties of Barium Titanate Single Crystals Containing Added Nickel Grown from a Potassium Fluoride Melt. (E) P. Coufová and J. Novák. 14, 61 (1969) [14, 79 (1969)]

NOVIK, V. K.
Characteristic Features of the Pyroelectric Effect and Electrical Conductivity in Single Crystals of $LiNbO_3$ in the Range 20-250°C. (E) M. B. Roitberg, V. K. Novik, and N. D. Gavrilova. 14, 814 (1970) [14, 938 (1969)]

NOVOZHILOV, A. I.
Electron Paramagnetic Resonance Study of Tourmalines. (E) A. I. Novozhilov, I. E. Voskresenskaya, and M. I. Samoilovich. 14, 416 (1969) [14, 507 (1969)]

NURIEV, I. R.
Electron Diffraction Investigation of the Phase Formation and the Kinetics of Phase Transformations in the Ag–Se System. (E) G. A. Efendiev, I. R. Nuriev, and R. B. Shafizdade. 14, 787 (1970) [14, 915 (1969)]

OBUKHOVA, O. V.
Effect of State of Lead Impurity on Mechanical Properties of Potassium Chloride and Sodium Chloride Crystals. (E) O. V. Obukhova, M. M. Tagieva, and M. P. Shaskol'skaya. 14, 825 (1970) [14, 948 (1969)]

ODLIS, M. N.
X-Ray Investigation of Crystallization Processes in Antimony Trisulfide Films. (E) E. M. Smirnova, T. A. Mingazin, and M. N. Odlis. 14, 303 (1969) [14, 367 (1969)]

ODOBESKU, A. I.
Effect of an Electrostatic Field on the Kinetics of Selenium Crystallization from the Gas Phase. (E) G. B. Abdullaev, A. I. Odobesku, and A. Yu. Kon. 14, 972 (1970) [14, 1108 (1969)]

OGANEZOV, K. A.
Mass Transfer in a Hollow-Cathode Discharge. (E) K. A. Oganezov, A. Kh. Chamagua, and B. Ya. Chikhladze. 14, 963 (1970) [14, 1100 (1969)]

OLEKHNOVICH, N. M.
The Polarization Factor in X-Ray Scattering, Taking Into Account Monochromator Extinction. (T) N. M. Olekhnovich. 14, 203 (1969) [14, 261 (1969)]
The Polarization of X Rays by Real Crystals and the Determination of Their Mosaic Structure. (T/E) N. M. Olekhnovich. 14, 724 (1970) [14, 840 (1969)]

ORLOV, V. P.
Interaction of Nonparallel Dislocations in an Anisotropic Medium (T) S. S. Orlov and V. L. Indenbom. 14, 675 (1970) [14, 780 (1969)]
Geometry of the Diffraction Patterns of Slow Electrons Reflected by the Surface of Crystals with a NaCl Lattice Type. (E) I. F. Dvoryankin, A. Yu. Mityagin, and V. P. Orlov. 14, 772 (1970) [14, 902 (1969)]

OSIPOVA, L. P.
The Optical Activity of α-Quartz Irradiated by Fast Neutrons. (E) V. G. Zubov, E. A. Kadyshevich, L. P. Osipova, and A. P. Shtyrkova. 14, 535 (1970) [14, 634 (1969)]

OZEROV, R. P.
The Design of Tables of Shubnikov Space Groups of Dichroic Symmetry. (T) R. P. Ozerov. 14, 323 (1969) [14, 393 (1969)]

PANOV, V. N.
Graphical Construction of Diffuse-Scattering Regions. (E) G. V. Kleshchev, D. V. Shumilov, A. I. Sheinkman, and V. N. Panov. 14, 948 (1970) [14, 1088 (1969)]

PANTELEEV, V. V.
Production of Epitaxial CdS Films by Gas Transport Reactions. (E) S. A. Aitkhozhin, I. M. Kotelyanskii, G. B. Bokii, V. F. Dvoryankin, G. G. Dvoryankina, and V. V. Panteleev. 14, 309 (1969) [14, 373 (1969)]

PASHKOVSKII, M. V.
Production of Thin Films of the α-Modification of Mercury Sulfide. (E) B. F. Bilen'kii, M. V. Miliyanchuk, M. V. Pashkovskii, and I. V. Savitskii. 14, 975 (1970) [14, 1111 (1969)]

PASTERNAK, N. A.
Slip Elements and Dislocation Reactions in Ammonium Dihydrophosphate Crystals. (E) N. A. Pasternak, Yu. M. Fishman, N. F. Kirilyuk, and A. A. Predvoditelev. 14, 243 (1969) [14, 310 (1969)]

PAVLOVA, G. D.
Dependence of the Rates of Growth and Solution of Spherical Single Crystals of $Zn(NH_4)_2(SO_4)_2 \cdot 6H_2O$ on Their Velocities in Solution. (E) A. V. Belyustin and G. D. Pavlova. 14, 829 (1970) [14, 952 (1969)]

PELEVIN, O. V.
Effect of Impurity Evaporation from a Melt on the Transient Period of Impurity Repulsion. (T) V. V. Voronkov, M. G. Mil'vidskii, and O. V. Pelevin. 14, 951 (1970) [14, 1091 (1969)]

PEREKALINA, Z. B.
Rotation of the Plane of Polarization of Light in the $Rb_2Se_2O_6$ Crystal. (E) Z. B. Perekalina, R. N. Shchelokov, and V. I. Burkov. 14, 270 (1969) [14, 338 (1969)]
Interpretation of Optical Activity in Crystals of Salts of Dithionic Acid with Monovalent Cations. (T/E) Z. B. Perekalina and N. L. Smirnova. 14, 708 (1970) [14, 820 (1969)]

PERFILOVA, V. É.
The Fourth-Order Electrooptic Effect in Crystals of the KH_2PO_4 Group. (E) V. É. Perfilova, Yu. I. Sirotin, and A. S. Sonin. 14, 136 (1969) [14, 157 (1969)]
Electrooptical Properties of Barium Titanate in the Paraelectric Phase. (E) A. S. Sonin and V. É. Perfilova. 14, 419 (1959) [14, 510 (1969)]

PESHIKOV, E. V.
Regularities of the Pulsed Polarization Reversal of Triglycinsulfate Crystals. (T) E. V. Peshikov. 14, 934 (1970) [14, 1074 (1969)]

PETRIN, A. I.
Certain Characteristics of the Crystallization of a Molten Drop. (E) G. A. Kurov, A. I. Petrin, and V. V. Ignat'ev. 14, 122 (1969) [14, 144 (1969)]

PETROV, I. I.
Electron-Diffraction Analysis of PbTe–Bi_2Te_3 System Phases. (E) I. I. Petrov and R. M. Imamov. 14, 593 (1970) [14, 699 (1969)]

PETROV, V. M.
The Dielectric Dispersion of Crystals of Potassium Ferrocyanide. (E) V. M. Petrov, A. Ya. Krasnikova, and E. S. Yashumova. 14, 811 (1970) [14, 935 (1969)]

PETRUNIN, V. F.
Neutron-Diffraction Study of the Decomposition and Ordering in the Niobium–Hydrogen System. (E/T) V. A. Somenkov, V. F. Petrunin, S. Sh. Shil'shtein, and A. A. Chertkov. 14, 522 (1970) 14, 617 (1969)]

PETRUSEVICH, R. L.
On the Nature of "Growth Bands" in Epitaxial Layers of GaP_xAs_{1-x}. (T) F. A. Gimel'farb, E. S. Kopeliovich, V. N. Maslov, R. L. Petrusevich, and V. I. Fistul'. 14, 967 (1970) [14, 1104 (1969)]

PIGAL'SKAYA, L. A.
Temperature Fields in Optical Single Crystals at High Temperatures. (T) L. A. Pigal'skaya. 14, 279 (1969) [14, 347 (1969)]
PINSKER, Z. G.
On the Stacking of Octahedral Anion Complexes. (T) G. Z. Pinsker. 14, 17 (1969) [14, 26 (1969)]
The Question of Disorder in the Tetragonal Phase $Cu_{4-x}Te_3$. (E) R. V. Baranova and Z. G. Pinsker. 14, 214 (1969) [14, 274 (1969)]
PLATONOV, G. L.
Electron-Diffraction and X-Ray-Diffraction Investigation of Atomic Displacements in the Ferromagnet $Pb(Fe_{0.5}, Nb_{0.5})O_3$. (E) G. L. Platonov, L. A. Drobyshev, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 692 (1970) [14, 800 (1969)]
PLYUSHCHEV, V. E.
X-Ray Diffraction Study of the Crystalline Hydrates of the Perrhenates of the Alkaline Earth Metals. (E) M. B. Varfolomeev, I. P. Chupakhin, and V. E. Plyushchev. 14, 924 (1970) [14, 1065 (1969)]
PLYUSNINA, I. I.
An Infrared Spectroscopic Study of Tourmalines. (E) I. I. Plyusnina, B. G. Granadchikova, and I. E. Voskresenskaya. 14, 370 (1969) [14, 450 (1969)]
POGODINA, V. N.
Crystal Orientation in Lead Sulfide Films Vacuum-Deposited on Muscovite. (E) S. A. Semiletov, R. V. Kudryavtseva, V. N. Pogodina, and V. V. Karabinskaya. 14, 402 (1969) [14, 491 (1969)]
POLYAKOVA, N. A.
Three-Beam Borrmann Effect in Germanium. (E) A. A. Kantsel'son, V. I. Kisin, and N. A. Polyakova. 14, 839 (1970) [14, 965 (1969)]
PONOMAREV, V. I.
Refinement of the Atomic Structure of Baotite and the Isomorphic Relationships in this Mineral. (E) Yu. V. Nekrasov, V. I. Ponomarev, V. I. Simonov, and D. M. Kheiker. 14, 508 (1970) [14, 602 (1969)]
POPKOVA, E. G.
On the Mechanism of Selective Etching at Dislocations in Zinc. (E) E. G. Popkova, G. S. Matveeva, and A. A. Predvoditelev. 14, 40 (1969) [14, 53 (1969)]
POPOLITOV, V. I.
Synthesis of Single Crystals of Ternary Chalcohalides of the $A^VB^{VI}C^{VII}$ Group. (E) V. I. Popolitov. 14, 312 (1969) [14, 375 (1969)]
The Hydrothermal Crystallization of Sb_2S_3. (E/T) V. I. Popolitov. 14, 461 (1969) [14, 545 (1969)]
POPOV, E. S.
The Difference in the Mechanisms of the Movement of the Domain Walls in Crystals of Rochelle Salt Close to the Upper and Lower Curie Points. (T/E) A. V. Shil'nikov, E. S. Popov, and S. L. Rapoport. 14, 890 (1970) [14, 1028 (1969)]
POPOV, V. I.
Solubility and Crystallization of Yttrium and Rare-Earth Orthovandates. (E) V. A. Timofeeva, V. I. Popov, and T. S. Kon'kova. 14, 128 (1969)] [14, 150 (1969)]
POPOVA, A. A.
The Preparation and Certain Properties of Single-Crystal $LaNbO_4$. (E) L. M. Belyaev, F. I. Dmitrieva, N. M. Melankholin, A. A. Popova, and L. V. Soboleva. 14, 294 (1969) [14, 359 (1969)]
PORTNOV, V. N.
Anomalous Double Refraction in Crystals of Potassium Dihydrogen Phosphate. (E) A. V. Belyustin, V. N. Portnov, and N. S. Stepanova. 14, 617 (1970) [14, 719 (1969)]
Growth Rate of the {010} Plane of Rochelle Salt in the Presence of Pure Direct Sky Blue Dye. (E) V. N. Portnov, A. V. Rykhlyuk and A. V. Belyustin. 14, 643 (1970) [14, 744 (1969)]
PORTNOVA, N. L.
Dihedral Angles in Crystalline Condensed Phosphates. (T) A. I. Soklakov and N. L. Portnova. 14, 119 (1969) [14, 141 (1969)]
POSTNIKOV, V. V.
Various Properties of Epitaxial Films of Si Obtained by Sublimation in Vacuum from Sources Doped with As and P. (E) V. P. Kuznetsov and V. V. Postnikov. 14, 441 (1969) [14, 529 (1969)]
POVET'EVA, Z. P.
Atomic Structure of $K_2Co(NCS)_4 \cdot 3H_2O$. (T) Z. V. Zvonkova, G. S. Zhdanov, and Z. P. Povet'eva. 14, 583 (1970) [14, 691 (1969)]
Crystal Structure of N-Thiocyanogen Phenylene. (E) Z. P. Povet'eva, Z. V. Zvonkova, and V. P. Glushkova. 14, 588 (1970) [14, 696 (1969)]
PREDVODITELEV, A. A.
On the Mechanism of Selective Etching at Dislocations in Zinc. (E) E. G. Popkova, G. S. Matveeva, and A. A. Predvoditelev. 14, 40 (1969) [14, 53 (1969)]
Slip Elements and Dislocation Reactions in Ammonium Dihydrophosphate Crystals. (E) N. A. Pasternak, Yu. M. Fishman, N. F. Kirilyuk, and A. A. Predvoditelev. 14, 243 (1969) [14, 310 (1969)]
PROKOSHINA, S. M.
Experimental Study of the Effect of Texture on the Form of Diffraction Lines. (E) A. S. Kagan and S. M. Prokoshina. 14, 429 (1969) [14, 518 (1969)]
PROSKURYAKOV, B. F.
Single Crystals of Cadmium Metatitanate and Solid Solutions Based on It. (E) M. L. Sholokhovich, O. P. Kramarov, B. F. Proskuryakov, and E. K. Zvorykina. 14, 884 (1970) [14, 1021 (1969)]
RAIZ, V. Sh.
Evaluation of Deviations from Isomorphism in Protein Crystals. (E/T) V. Sh. Raiz and N. S. Andreeva. 14, 360 (1969) [14, 437 (1969)]
RAKOV, V. V.
Distribution of Volatile Impurities Ahead of the Crystallization Front in a Melt. (T) B. D. Lainer, V. V. Voronkov, M. G. Mil'vidskii, and V. V. Rakov. 14, 451 (1969) [14, 537 (1969)]
Crystallization of Nonstoichiometric Melts of Decomposable Compounds. (T/E) B. D. Lainer, A. V. Berkova, M. G. Mil'vidskii, and V. V. Rakov. 14, 743 (1970) [14, 867 (1969)]
RAPOPORT, S. L.
The Difference in the Mechanisms of the Movement of the Domain Walls in Crystals of Rochelle Salt Close to the Upper and Lower Curie Points. (T/E) A. V. Shil'nikov, E. S. Popov, and S. L. Rapoport. 14, 890 (1970) [14, 1028 (1969)]
RAVIN, V. S.
Calculation of the Crystallization Rate for Droplets of Melt on a Dissimilar Substrate. (T) V. S. Ravin. 14, 642 (1970) [14, 744 (1969)]
RESHCHIKOVA, L. M.
Twinning and Birefringence in Rhombic $KMnF_3$. (E) K. S. Aleksandrov and L. M. Reshchikova. 14, 614 (1970) [14, 716 (1969)]
REZ, I. S.
Electrooptical Properties of Thallium-Cadmium Langbeinite. (E) A. S. Vasilevskaya, I. G. Ganeev, I. S. Rez, and A. S. Sonin. 14, 421 (1969) [14, 511 (1969)]
RIGERMAN, L. G.
Electron Diffraction and Electron Microscope Studies of Thin $BaTiO_3$ Condensates. (E) L. G. Rigerman, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 977 (1970) [14, 1112 (1969)]
ROGOV, G. I.
Yttrium Aluminate Containing TR^{3+} Ions as an Active Medium for Lasers. (E) Kh. S. Bagdasarov, G. A. Bogomolova, A. A. Kaminskii, A. M. Kevorkov, and G. I. Rogov. 14, 423 (1969) [14, 513 (1969)]
ROITBERG, M. B.
Characteristic Features of the Pyroelectric Effect and Electrical Conductivity in Single Crystals of $LiNbO_3$ in the Range 20-250°C. (E) M. B. Roitberg, V. K. Novik, and N. D. Gavrilova. 14, 814 (1970) [14, 938 (1969)]

ROZHANSKII, V. N.
Plasticity of Fiber Crystals Grown by Different Methods. (E) E. Khartmann, V. N. Rozhanskii, and A. P. Kruzhilina. 14, 828 (1970) [14, 951 (1969)]
RUDYAK, V. M.
Effect of Illumination on Polarization Reversal in the Ferroelectric Semiconductor SbSI Using the Barkhausen Effect. (E) A. A. Bogomolov, V. V. Ivanov, and V. M. Rudyak. 14, 894 (1970) [14, 1033 (1969)]
RYBIN, Yu. A.
Effect of Rotation of the Face Paths during Growth of Germanium Single Crystals. (E) A. N. Kirgintsev and Yu. A. Rybin. 14, 831 (1970) [14, 954 (1969)]
RYKHLYUK, A. V.
Growth Rate of the {010} Plane of Rochelle Salt in the Presence of Pure Direct Sky Blue Dye. (E) V. N. Portnov, A. V. Rykhlyuk and A. V. Belyustin. 14, 643 (1970) [14, 744 (1969)]

SAFONOV, A. I.
Production and Optical Properties of $Bi_{12}GeO_{20}$ Single Crystals. (E) A. I. Safonov, S. A. Baryshev, T. I. Nikoforova, G. N. Antonov, and S. A. Fedulov. 14, 131 (1969) [14, 152 (1969)]
SAFRONOV, G. M.
The Optical Activity of Bismuth Compounds. (E) V. N. Batog, V. I. Burkov, V. A. Kizel', V. A. Madii, G. M. Safronov, and V. M. Skorikov. 14, 803 (1970) [14, 928 (1969)]
SAL'NIKOV, V. D.
Preparation and Physicochemical Properties of the Compounds $Bi_{12}GeO_{20}$ and $Bi_4(GeO_4)_3$. (E) Yu. S. Kuz'minov, M. G. Lifshits, and V. D. Salnikov. 14, 297 (1969) [14, 363 (1969)]
SAMOILOVICH, M. I.
Electron Paramagnetic Resonance Study of Tourmalines. (E) A. I. Novozhilov, I. E. Voskresenskaya, and M. I. Samoilovich. 14, 416 (1969) [14, 507 (1969)]
Characteristics of Radiation Color Centers and Microisomorphism in Crystals. (R) M. I. Samilovich and L. I. Tsinober. 14, 656 (1970) [14, 755 (1969)]
SAVITSKII, I. V.
Production of Thin Films of the α-Modification of Mercury Sulfide. (E) B. F. Bilen'kii, M. V. Miliyanchuk, M. V. Pashkovskii, and I. V. Savitskii. 14, 975 (1970) [14, 1111 (1969)]
SAVVINOV, A. M.
Dielectric Properties of KDP Crystals Containing Additions of Chromium. (E) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, I. V. Gavrilova, A. N. Kovalenko, S. G. Savvinova, and A. M. Savvinov. 14, 816 (1970) [14, 940 (1969)]
SAVVINOVA, S. G.
Dielectric Properties of KDP Crystals Containing Additions of Chromium. (E) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, I. V. Gavrilova, A. N. Kovalenko, S. G. Savvinova, and A. M. Savvinov. 14, 816 (1970) [14, 940 (1969)]
SELEZNEVA, L. N.
Structural Transformations of Fluorides above and below the Néel Temperature. (E) M. A. Vinnik and L. N. Selezneva. 14, 928(1970) [14, 1068 (1969)]
SEMENOV, V. E.
Numerical Notation for Describing the Structures of the Hexaferrites. (T) M. A. Vinnik and V. E. Semenov. 14, 103 (1969) [14, 126 (1969)]
SEMILETOV, S. A.
Crystal Orientation in Lead Sulfide Films Vacuum-Deposited on Muscovite. (E) S. A. Semiletov, R. V. Kudryavtseva, V. N. Pogodina, and V. V. Karabinskaya. 14, 402 (1969) [14, 491 (1969)]
The Crystal Structure of Palladium Telluride $Pd_{4-x}Te$. (E) V. S. Khar'kin, R. M. Imamov, and S. A. Semiletov. 14, 779 (1970) [14, 907 (1969)]
SEMIN, G. K.
Effect of Torsional Oscillations and Hindered Molecular Rotation on the Spin-Lattice Relaxation Time of Nuclear Quadrupole Resonance in Molecular Crystals. (T) P. Sh. Lotfulin and G. K. Semin. 14, 700 (1970) [14, 809 (1969)]
SHAFIZADE, R. B.
Electron Diffraction Investigation of the Phase Formation and the Kinetics of Phase Transformations in the Ag–Se System. (E) G. A. Efendiev, I. R. Nuriev, and R. B. Shafizdade. 14, 787 (1970) [14, 915 (1969)]
SHALANKOVA, V. P.
Structural Transformations in Synthetic MoS_2. (E) A. N. Zelikman, G. V. Indenbaum, M. V. Teslitskaya, and V. P. Shalankova. 14, 687 (1970) [14, 795 (1969)]
SHALIMOVA, K. V.
Influence of Point Defects on the Crystalline Structure of Zinc Sulfide Powders. (E) N. K. Morozova, M. M. Veselkova, A. F. Botnev, and K. V. Shalimova. 14, 74 (1969) [14, 95 (1969)]
Crystal Structure of Solid Solutions in the ZnSe–CdSe System. (E) K. V. Shalimova, A. F. Botnev, V. A. Dmitriev, N. Z. Kognovitskaya, and V. V. Starostin. 14, 531 (1970) [14, 629 (1969)]
SHAMBUROV, V. A.
The Electrooptical Effect in Rochelle Salt Crystals. (E) V. A. Shamburov and I. T. Tukhtasunov. 14, 230 (1969) [14, 293 (1969)]
Rotation of the Optic Axis of a Rochelle Salt Crystal by an Electric Field. (E) I. T. Tukhtasunov and V. A. Shamburov. 14, 800 (1970) [14, 925 (1969)]
The Electrooptic Effect in Optically Heterogeneous Crystals. (T) V. A. Shamburov. 14, 875 (1970) [14, 1009 (1969)]
SHASKOL'SKAYA, M. P.
Effect of Small Doses of Neutron Irradiation on the Range of the Leading Dislocations of a Star of Etch Figures in Alkali Halide Crystals. (E) E. B. Gusev, I. B. Berman, and M. P. Shaskol'skaya. 14, 117 (1969) [14, 139 (1969)]
Piezooptic Constants of LiF, NaF, NaCl, NaI, KCl, KBr, KI, and RbI Single Crystals. (E) S. S. Gorbach, L. A. Deptsova, G. F. Dobrzhanskii, V. Yu. Markovskii, and M. P. Shaskol'skaya. 14, 627 (1970) [14, 729 (1969)]
Effect of State of Lead Impurity on Mechanical Properties of Potassium Chloride and Sodium Chloride Crystals. (E) O. V. Obukhova, M. M. Tagieva, and M. P. Shaskol'skaya. 14, 825 (1970) [14, 948 (1969)]
Microhardness Anisotropy of Semiconductor Single Crystals with the Würtzite, Sphalerite, and Diamond Structure. (E) L. G. Tsinzerling, E. S. Berkovich, L. A. Sysoev, and M. P. Shaskol'skaya. 14, 897 (1970) [14, 1037 (1969)]
Slip Lines in CdS after Plastic Deformation. (E) A. A. Blistanov, O. M. Kugaenko, V. V. Geras'kin, and M. P. Shaskol'skaya. 14, 941 (1970) [14, 1080 (1969)]
SHCHEDRIN, B. M.
False Maxima in Structure-Separating Functions. (T) V. I. Simonov, B. M. Shchedrin, and A. M. Soldatenkov. 14, 186 (1969) [14, 237 (1969)]
Modification of the Differential Synthesis Method. (T) B. M. Shchedrin. 14, 193 (1969) [14, 247 (1969)]
Smoothing of the Electron Distribution Function by Modification of Its Fourier Coefficients. (T) B. M. Shchedrin and V. I. Simonov. 14, 411 (1969) [14, 502 (1969)]
Crystal Structure of Chloro-Bis-Dimethyl-Ammonium Glyoximate of Cobalt (III). (E) T. I. Malinovskii, Yu. A. Simonov, and B. M. Shchedrin. 14, 863 (1970) [14, 995 (1969)]
SHCHELOKOV, R. N.
Rotation of the Plane of Polarization of Light in the $Rb_2Se_2O_6$ Crystal. (E) Z. B. Perekalina, R. N. Shchelokov, and V. I. Burkov. 14, 270 (1969) [14, 338 (1969)]

SHCHEPETKIN, A. A.
Synthesis and Mutual Solubility in Spinel Solid Solutions in Me–Ti–Fe–O Systems (Me = Zn, Co, Ni, and Mn). (E) A. A. Shchepetkin, R. G. Zakharov, M. I. Zinigrad, and G. I. Chufarov. 14, 761 (1970) [14, 889 (1969)]

SHCHERBAK, V. I.
Neutron Diffraction Study of Zirconium Carbohydride. (E) V. N. Bykov, V. S. Golovkin, V. P. Kalinin, V. A. Levdik, and V. I. Shcherbak. 14, 785 (1970) [14, 913 (1969)]

SHCHERBAKOV, V. N.
The Nuclear Magnetic Resonance of D^2 in the $(ND_4)_3BeF_4$ Crystal. (E) I. P. Aleksandrova and V. N. Shcherbakov. 14, 608 (1970) [14, 711 (1969)]

SHEFTAL', N. N.
Preparation of Germanium Films on Sapphire by Pyrolysis of Hydrides. (E) T. A. Zeveke, T. I. Medvedeva, and N. N. Sheftal'. 14, 649 (1970) [14, 748 (1969)]

SHEINKMAN, A. I.
Graphical Construction of Diffuse-Scattering Regions. (E) G. V. Kleshchev, D. V. Shumilov, A. I. Sheinkman, and V. N. Panov. 14, 948 (1970) [14, 1088 (1969)]

SHIL'NIKOV, A. V.
The Difference in the Mechanisms of the Movement of the Domain Walls in Crystals of Rochelle Salt Close to the Upper and Lower Curie Points. (T/E) A. V. Shil'nikov, E. S. Popov, and S. L. Rapoport. 14, 890 (1970) [14, 1028 (1969)]

SHIL'SHTEIN, S. Sh.
Neutron-Diffraction Study of the Decomposition and Ordering in the Niobium–Hydrogen System. (E/T) V. A. Somenkov, V. F. Petrunin, S. Sh. Shil'shtein, and A. A. Chertkov. 14, 522 (1970) 14, 617 (1969)]

SHIN, V.
The Spectral Characteristic of Vibrating Crystals as a Function of the Direction of the Exciting Electric Field. (T) A. E. Karaul'nik and V. Shin. 14, 65 (1969) [14, 84 (1969)]

SHISHKINA, M. V.
Infrared Dichroism Study of Liquid Crystals of n-Alkoxybenzoic Acids. (E) M. M. Kusakov, V. L. Khodzhaeva, M. V. Shiskhkina, and I. I. Konstantinov. 14, 398 (1969) [14, 485 (1969)]

SHKLOVER, L. P.
X-Ray Investigation of Sodium-Lanthanum Molybdates. (E) Ts. S. Shugal, I. M. Britan, and L. P. Shklover. 14, 93 (1969) [14, 118 (1969)]

SHOLOKHOVICH, M. L.
Single Crystals of Cadmium Metatitanate and Solid Solutions Based on It. (E) M. L. Sholokhovich, O. P. Kramarov, B. F. Proskuryakov, and E. K. Zvorykina. 14, 884 (1970) [14, 1021 (1969)]

SHTERNBERG, A. A.
Defect Decoration and Increased Radiation Resistance in Quartz. (E) A. A. Shternberg, L. A. Gordienko, and L. I. Tsinober. 14, 728 (1970) [14, 845 (1969)]

SHTREMEL', M. A.
Optimum Planning of Experiments for the Harmonic Analysis of Line Shapes. (T) M. A. Shtremel'. 14, 24 (1969) [14, 34 (1969)]

SHTYRKOVA, A. P.
The Optical Activity of α-Quartz Irradiated by Fast Neutrons. (E) V. G. Zubov, E. A. Kadyshevich, L. P. Osipova, and A. P. Shtyrkova. 14, 535 (1970) [14, 634 (1969)]
Internal Stresses and Refractive Index of Quartz Irradiated with Fast Neutrons. (E) A. P. Shtyrkova. 14, 624 (1970) [14, 726 (1969)]

SHUBNIKOV, A. V.
Evgraf Stepanovich Fedororv (5th Anniversary of His Death). (R) A. V. Shubnikov. 14, 319 (1969) [14, 387 (1969)]

SHUGAL, Ts. S.
X-Ray Investigation of Sodium-Lanthanum Molybdates. (E) Ts. S. Shugal, I. M. Britan, and L. P. Shklover. 14, 93 (1969) [14, 118 (1969)]

SHUMILOV, D. V.
Graphical Construction of Diffuse-Scattering Regions. (E) G. V. Kleshchev, D. V. Shumilov, A. I. Sheinkman, and V. N. Panov. 14, 948 (1970) [14, 1088 (1969)]

SHUVALOV, L. A.
New Crystals Belonging to the Family of Alkali Trihydroselenites, the Ferroelectric $RbH_3(SeO_3)_2$ and the Linear Dielectric $NH_4H_3 \cdot (SeO_3)_2$. (E) L. A. Shuvalov, N. R. Ivanov, N. V. Gordeva, and L. F. Kirpichnikova. 14, 554 (1970) [14, 658 (1969)]

SHUVAEVA, E. T.
Synthesis and Structural Studies of Some Perovskites Which Contain Bismuth. (E) E. T. Shuvaeva and E. G. Fesenko. 14, 926 (1970) [14, 1066 (1969)]

SIL'VESTROVA, I. M.
The Growth of Potassium Hydrogen Phthalate Crystals and Their Optical, Piezoelectric, and Elastic Properties. (E) L. M. Belyaev, G. S. Belikova, A. B. Gil'varg, and I. M. Sil'vestrova. 14, 544 (1970) [14, 645 (1969)]

SIMONOV, M. A.
Crystal Structure of Zinc Chkalovite $Na_2Zn[Si_2O_6]$. (E) E. L. Belokoneva, Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov. 14, 918 (1970) [14, 1060 (1969)]

SIMONOV, V. I.
Determination of the Crystal Structure of $Na_2Mn_2Si_2O_7$ by the Superposition Method. (E) L. P. Astakhova and V. I. Simonov. 14, 1 (1969) [14, 3 (1969)]
False Maxima in Structure-Separating Functions. (T) V. I. Simonov, B. M. Shchedrin, and A. M. Soldatenkov. 14, 186 (1969) [14, 237 (1969)]
Smoothing of the Electron Distribution Function by Modification of Its Fourier Coefficients. (T) B. M. Shchedrin and V. I. Simonov. 14, 411 (1969) [14, 502 (1969)]
Refinement of the Atomic Structure of Baotite and the Isomorphic Relationships in this Mineral. (E) Yu. V. Nekrasov, V. I. Ponomarev, V. I. Simonov, and D. M. Kheiker. 14, 508 (1970) [14, 602 (1969)]

SIMONOV, Yu. A.
First Autumn School on Apparatus and Methods of Studying the Atomic Structure of Matter. (R) Yu. A. Simonov. 14, 480 (1969) [14, 564 (1969)]
Crystal Structure of Chloro-Bis-Dimethyl-Ammonium Glyoximate of Cobalt (III). (E) T. I. Malinovskii, Yu. A. Simonov, and B. M. Shchedrin. 14, 863 (1970) [14, 995 (1969)]

SIMANOVSKII, A. A.
Morphology of ZnSe Crystals Grown by Means of a Chemical Transport Reaction. (E) A. A. Simanovskii. 14, 960 (1970) [14, 1098 (1969)]

SIROTIN, Yu. I.
The Fourth-Order Electrooptic Effect in Crystals of the KH_2PO_4 Group. (E) V. É. Perfilova, Yu. I. Sirotin, and A. S. Sonin. 14, 136 (1969) [14, 157 (1969)]
Second Order Phase Transitions in Crystals with the Space Group O_h^1. (T) K. S. Aleksandrov, V. I. Zinenko, L. M. Mikhel'son, and Yu. I. Sirotin. 14, 256 (1969) [14, 327 (1969)]
The Role of Crystal Structure Type in the Theory of Second-Order Phase Transitions. (T) L. M. Mikhel'son and Yu. I. Sirotin. 14, 485 (1970) [14, 573 (1969)]

SIZOV, V. A.
The Localization of Zn^{2+} Ions in the Hexagonal Ferrite $(Sr_{0.8}Ba_{0.2})_2Zn_2F_{12}O_{22}$. (E) V. A. Sizov, N. N. Agapova, and I. I. Yamzin. 14, 263 (1969) [14, 333 (1969)]

SKAKOV, Yu. A.
An Ordered Phase on Quadrupled Repeat Distance on the Basis of a bcc Lattice. (E) Yu. O. Mezhennyi, Yu. A. Skakov, S. K. Maksimov, and V. B. Spiridonov. 14, 601 (1970) [14, 706 (1969)]

SKIDAN, B. S.
Growth of Aluminum Garnet Single Crystals Containing a Neodymium Impurity. (E) V. Z. Bychkov, S. A. Fedulov, A. S. Vlasov, B. S. Skidan, and V. K. Balashov. 14, 981 (1970) [14, 1115 (1969)]

SKORIKOV, V. M.
The Optical Activity of Bismuth Compounds. (E) V. N. Batog, V. I. Burkov, V. A. Kizel', V. A. Madii, G. M. Safronov, and V. M. Skorikov. 14, 803 (1970) [14, 928 (1969)]

SMIRNOVA, E. M.
Oriented Crystallization of Vacuum-Deposited Cadmium Sulfide. (E) T. A. Mingazin and E. M. Smirnova. 14, 300 (1969) [14, 366 (1969)]
X-Ray Investigation of Crystallization Processes in Antimony Trisulfide Films. (E) E. M. Smirnova, T. A. Mingazin, and M. N. Odlis. 14, 303 (1969) [14, 367 (1969)]

SMIRNOVA, N. L.
Interpretation of Optical Activity in Crystals of Salts of Dithionic Acid with Monovalent Cations. (T/E) Z. B. Perekalina and N. L. Smirnova. 14, 708 (1970) [14, 820 (1969)]

SMIRNOVA, Z. F.
The Microblock Structure of Hydrothermal Crystals of Corundum. (E) V. N. Voitsekhovskii, P. I. Nikitichev, Z. F. Smirnova, and L. N. Furmakova. 14, 733 (1970) [14, 852 (1969)]

SMOLIN, Yu. I.
Determination of the Structure of Gadolinium Oxyorthosilicate $Gd_2O_3 \cdot SiO_2$. (T) Yu. I. Smolin and S. P. Tkachev. 14, 14 (1969) [14, 22 (1969)]
The Crystal Structure of Ytterbium Oxyorthosilicate Yb_2SiO_5. (E) Yu. I. Smolin. 14, 854 (1970) [14, 985 (1969)]

SMYSLOV, I. I.
Calculation of the Transverse Components of Certain Fourth-Rank Tensors for Single Crystals with a Cubic System by Means of an Electronic Digital Computer. (T/E) I. I. Smyslov. 14, 385 (1969) [14, 468 (1969)]

SOBOLEV, B. P.
A Laser Based on $SrF_2-YF_3-Nd^{3+}$ Crystals. (E) L. S. Garashina, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 799 (1970) [14, 925 (1969)]

SOBOLEVA, L. V.
The Preparation and Certain Properties of Single-Crystal $LaNbO_4$. (E) L. M. Belyaev, F. I. Dmitrieva, N. M. Melankholin, A. A. Popova, and L. V. Soboleva. 14, 294 (1969) [14, 359 (1969)]

SOKHOR, M. I.
X-Ray Investigation of Thermal Expansion in Synthetic and Natural Diamonds. (E) M. I. Sokhor and V. D. Vitol. 14, 632 (1970) [14, 734 (1969)]

SOKLAKOV, A. I.
Dihedral Angles in Crystalline Condensed Phosphates. (T) A. I. Soklakov and N. L. Portnova. 14, 119 (1969) [14, 141 (1969)]

SOKOL, A. A.
The Effect of Impurities in Ionic Crystals on the Epitaxy of Gold. (E) A. A. Sokol and V. M. Kosevich. 14, 438 (1969) [14, 527 (1969)]

SOLDATENKOV, A. M.
False Maxima in Structure-Separating Functions. (T) V. I. Simonov, B. M. Shchedrin, and A. M. Soldatenkov. 14, 186 (1969) [14, 237 (1969)]

SOLOV'EVA, L. P.
Crystal Structure of a Ditungstate (K, Nd)Nd$[WO_4]_2$. (E) L. P. Solov'eva and S. V. Borisov. 14, 518 (1970) [14, 613 (1969)]
Crystal Structure of a Synthetic Iron Beryllosilicate: $Fe_3BeSi_2O_8(F, OH)_2$. (E) V. V. Bakakin and L. P. Solov'eva. 14, (1970) [14, 1063 (1969)]

SOMENKOV, V. A.
Neutron-Diffraction Study of the Decomposition and Ordering in the Niobium–Hydrogen System. (E/T) V. A. Somenkov, V. F. Petrunin, S. Sh. Shil'shtein, and A. A. Chertkov. 14, 522 (1970) 14, 617 (1969)]

SONIN, A. S.
The Fourth-Order Electrooptic Effect in Crystals of the KH_2PO_4 Group. (E) V. É. Perfilova, Yu. I. Sirotin, and A. S. Sonin. 14, 136 (1969) [14, 157 (1969)]
Electrooptical Properties of Tetramethylammonium Triiodomercurate (II) Crystals. (E) A. S. Sonin, A. S. Vasilevskaya, M. P. Kalitina, and E. I. Marchenko. 14, 275 (1969) [14, 343 (1969)]
Electrooptical Properties of Barium Titanate in the Paraelectric Phase. (E) A. S. Sonin and V. É. Perfilova. 14, 419 (1959) [14, 510 (1969)]
Electrooptical Properties of Thallium-Cadmium Langbeinite. (E) A. S. Vasilevskaya, I. G. Ganeev, I. S. Rez, and A. S. Sonin. 14, 421 (1969) [14, 511 (1969)]
The Relation of Structure to Electrooptic and Elastooptic Properties in Crystals of the KDP Group. (E/T) A. S. Vasilevskaya and A. S. Sonin. 14, 611 (1970) [14, 713 (1969)]

SPIRIDONOV, V. B.
An Ordered Phase on Quadrupled Repeat Distance on the Basis of a bcc Lattice. (E) Yu. O. Mezhennyi, Yu. A. Skakov, S. K. Maksimov, and V. B. Spiridonov. 14, 601 (1970) [14, 706 (1969)]

STARININ, K. V.
The Amorphization of Silicon Crystals on Irradiation with Fast Ions. (E) V. M. Gusev, Yu. V. Martynenko, and K. V. Starinin. 14, 908 (1970) [14, 1050 (1969)]

STAROSTIN, V. V.
Crystal Structure of Solid Solutions in the ZnSe–CdSe System. (E) K. V. Shalimova, A. F. Botnev, V. A. Dmitriev, N. Z. Kognovitskaya, and V. V. Starostin. 14, 531 (1970) [14, 629 (1969)]

STEPANOVA, N. S.
Anomalous Double Refraction in Crystals of Potassium Dihydrogen Phosphate. (E) A. V. Belyustin, V. N. Portnov, and N. S. Stepanova. 14, 617 (1970) [14, 719 (1969)]

SUDAKOV, N. I.
Growth of Nickel–Germanium Alloy Single Crystals from the Melt. (E) N. I. Sudakov, V. I. Kovrigin, and B. A. Ayurzanain. 14, 316 (1969) [14, 379 (1969)]

SVIRIDOV, D. T.
Absorption Spectra of Yttrium Aluminum Garnet (YAG) Crystals with Contaminant Ions of the Iron Group. (E) P. A. Arsen'ev and D. T. Sviridov. 14, 578 (1970) [14, 687 (1969)]
Configuration of $d^3)d^1$)-Electrons in a Monoclinic Field. (T) T. F. Veremeichik and D. T. Sviridov. 14, 704 (1970) [14, 814 (1969)]
Scheme of Levels for the Cr^{3+} Ions in Ruby (Configuration $3d^3$ in a Trigonal Field with Allowance for the Mixing of all States). (T/E) D. T. Sviridov and R. K. Sviridova. 14, 795 (1970) [14, 920 (1969)]

SVIRIDOVA, R. K
Scheme of Levels for the Cr^{3+} Ions in Ruby (Configuration $3d^3$ in a Trigonal Field with Allowance for the Mixing of all States). (T/E) D. T. Sviridov and R. K. Sviridova. 14, 795 (1970) [14, 920 (1969)]

SYSOEV, L. A.
Microhardness Anisotropy of Semiconductor Single Crystals with the Würtzite, Sphalerite, and Diamond Structure. (E) L. G. Tsinzerling, E. S. Berkovich, L. A. Sysoev, and M. P. Shaskol'skaya. 14, 897 (1970) [14, 1037 (1969)]

TAGIEVA, M. M.
Effect of State of Lead Impurity on Mechanical Properties of Potassium Chloride and Sodium Chloride Crystals. (E) O. V. Obukhova, M. M. Tagieva, and M. P. Shaskol'skaya. 14, 825 (1970) [14, 948 (1969)]

TALYBOV, A. G.
Phases in the System PbTe–Bi_2Te_3 and Their Atomic Structures. (E) B. K. Vainshtein, R. M. Imamov, and A. G. Talybov. 14, 597 (1970) [14, 703 (1969)]

TELEGINA, I. V.
Some Effects Associated with Compton Scattering in Single Crystals. (E) I. V. Telegina and E. V. Kolontsova. 14, 603 (1970) [14, 707 (1969)]

TEMKIN, D. E.
The Structure and Kinetics of Advance of a Monomolecular Step on a Crystalline Surface. (T) D. E. Temkin. 14, 179 (1969) [14, 227 (1969)]
A Kossel Model of the Kinetics of Growth and Evaporation Normal to a {100} Face. (T) D. E. Temkin. 14, 344 (1969) [14, 417 (1969)]
Toward a Theory of Diffusionless Crystal Growth. (T) D. E. Temkin. 14, 349 (1969) [14, 423 (1969)]
TESLITSKAYA, M. V.
Structural Transformations in Synthetic MoS_2. (E) A. N. Zelikman, G. V. Indenbaum, M. V. Teslitskaya, and V. P. Shalankova. 14, 687 (1970) [14, 795 (1969)]
TIMOFEEVA, V. A.
Solubility and Crystallization of Yttrium and Rare-Earth Orthovandates. (E) V. A. Timofeeva, V. I. Popov, and T. S. Kon'kova. 14, 128 (1969)] [14, 150 (1969)]
Solubility and Crystallization of Yttrium-Iron Garnet in Melts. (E) V. A. Timofeeva and N. I. Luk'yanova. 14, 757 (1970) [14, 884 (1969)]
TISHCHENKO, G. N.
Crystallographic Investigation of the Bromohydrate of Gramicidin S. (E) G. N. Tishchenko and K. A. Zykalova. 14, 211 (1969) [14, 270 (1969)]
TKACHEV, S. P.
Determination of the Structure of Gadolinium Oxyorthosilicate $Gd_2O_3 \cdot SiO_2$. (T) Yu. I. Smolin and S. P. Tkachev. 14, 14 (1969) [14, 22 (1969)]
TOKMAKOVA, E. I.
Electrical Properties of the Surfaces of Ionic Crystals. (E) G. I. Distler and E. I. Tokmakova. 14, 913 (1970) [14, 1055 (1969)]
TOMASHPOL'SKII, Yu. Ya.
Growing, Structure, and Magnetic Properties of $PbMn_{1/3}Nb_{1/3}O_3$ Single Crystals. (E) L. A. Drobyshev, B. I. Al'shin, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 634 (1970) [14, 736 (1969)]
Electron-Diffraction and X-Ray-Diffraction Investigation of Atomic Displacements in the Ferromagnet $Pb(Fe_{0.5}, Nb_{0.5})O_3$. (E) G. L. Platonov, L. A. Drobyshev, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 692 (1970) [14, 800 (1969)]
Electron Diffraction and Electron Microscope Studies of Thin $BaTiO_3$ Condensates. (E) L. G. Rigerman, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 977 (1970) [14, 1112 (1969)]
TORKATYUK, M. T.
Statistical Investigation of the Distribution of the Distances between Pinning Points of Dislocations. (E/T) A. I. Landau, V. N. Borzhkovskaya, M. T. Torkatyuk, and M. A. Davydova. 14, 238 (1969) [14, 303 (1969)]
TREIVUS, E. B.
Calculation of the Kinetic Coefficient and Activation Energy for Growth at Low Supersaturation. (T) E. B. Treivus. 14, 290 (1969) [14, 355 (1969)]
TROITSKII, O. A.
Anisotropy of the Radiative Reinforcement of Zinc Single Crystals. (E) O. A. Troitskii, L. G. Maistrenko, and N. P. Yatsenko. 14, 821 (1970) [14, 944 (1969)]
TRUSOV, L. I.
Nucleation During Crystal Growth. (T/E) V. F. Dorfman, M. B. Galina, and L. I. Trusov. 14, 55 (1969) [14, 71 (1969)]
Electrostatic Effects in the Formation of Nuclei (Seeds) at a Surface. (T) A. A. Chernov and L. I. Trusov. 14, 172 (1969) [14, 218 (1969)]
TSINOBER, L. I.
Hydrothermal Growth of Large Dislocation-Free Crystals of Quartz. (E) L. A. Gordienko, V. F. Miuskov, V. E. Khadzhi, and L. I. Tsinober. 14, 454 (1969) [14, 539 (1969)]
Characteristics of Radiation Color Centers and Microisomorphism in Crystals. (R) M. I. Samilovich and L. I. Tsinober. 14, 656 (1970) [14, 755 (1969)]
Defect Decoration and Increased Radiation Resistance in Quartz. (E) A. A. Shternberg, L. A. Gordienko, and L. I. Tsinober. 14, 728 (1970) [14, 845 (1969)]
TSINZERLING, L. G.
Microhardness Anisotropy of Semiconductor Single Crystals with the Würtzite, Sphalerite, and Diamond Structure. (E) L. G. Tsinzerling, E. S. Berkovich, L. A. Sysoev, and M. P. Shaskol'skaya. 14, 897 (1970) [14, 1037 (1969)]
TSVANKIN, D. Ya.
Distribution Functions and Diffraction Intensity in a Linear System of Particles. (T) D. Ya. Tsvankin. 14, 355 (1969) [14, 431 (1969)]
TSVETKOV, V. N.
Hindrance to Rotation of the Molecules and the Dielectric Anisotropy of Nematic Liquid Crystals. (T) V. N. Tsvetkov. 14, 573 (1970) [14, 681 (1969)]
TUKHTASUNOV, I. T.
The Electrooptical Effect in Rochelle Salt Crystals. (E) V. A. Shamburov and I. T. Tukhtasunov. 14, 230 (1969) [14, 293 (1969)]
Rotation of the Optic Axis of a Rochelle Salt Crystal by an Electric Field. (E) I. T. Tukhtasunov and V. A. Shamburov. 14, 800 (1970) [14, 925 (1969)]

UDALOV, Yu. P.
Perovskite Type Structures of Aluminate Rare-Earth Elements. (T/E) N. V. Margolis and Yu. P. Udalov. 14, 265 (1969) [14, 334 (1969)]
USHCHAPOVSKAYA, Z. F.
Crystal Structure of a Synthetic Iron Beryllosilicate: $Fe_2BeSi_2O_6(F, OH)_2$. (E) V. V. Bakakin and L. P. Solov'eva. 14, 922 (1970) [14, 1064 (1969)]

VAINSHTEIN, B. K.
Phases in the System $PbTe-Bi_2Te_3$ and Their Atomic Structures. (E) B. K. Vainshtein, R. M. Imamov, and A. G. Talybov. 14, 597 (1970) [14, 703 (1969)]
VARFOLOMEEV, M. B.
X-Ray Diffraction Study of the Crystalline Hydrates of the Perrhenates of the Alkaline Earth Metals. (E) M. B. Varfolomeev, I. P. Chupakhin, and V. E. Plyushchev. 14, 924 (1970) [14, 1065 (1969)]
VARINA, T. M;
The Absorption Spectrum of Olivine. (E) S. V. Grum-Grzhimailo, O. N. Boksha, and T. M. Varina. 14, 272 (1969) [14, 339 (1969)]
VASILEVSKAYA, A. S.
Electrooptical Properties of Tetramethylammonium Triiodomercurate (II) Crystals. (E) A. S. Sonin, A. S. Vasilevskaya, M. P. Kalitina, and E. I. Marchenko. 14, 275 (1969) [14, 343 (1969)]
Electrooptical Properties of Thallium-Cadmium Langbeinite. (E) A. S. Vasilevskaya, I. G. Ganeev, I. S. Rez, and A. S. Sonin. 14, 421 (1969) [14, 511 (1969)]
The Relation of Structure to Electrooptic and Elastooptic Properties in Crystals of the KDP Group. (E/T) A. S. Vasilevskaya and A. S. Sonin. 14, 611 (1970) [14, 713 (1969)]
VENEVTSEV, Yu. N.
X-Ray, Dielectric, and Piezoelectric Investigations of Solid Solutions in the $PbTiO_3-"BaNb_{1/5}O_3"$ System. (E) A. S. Viskov and Yu. N. Venevtsev. 14, 379 (1969) [14, 460 (1969)]
Growing, Structure, and Magnetic Properties of $PbMn_{1/3}Nb_{1/3}O_3$ Single Crystals. (E) L. A. Drobyshev, B. I. Al'shin, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 634 (1970) [14, 736 (1969)]

Electron-Diffraction and X-Ray-Diffraction Investigation of Atomic Displacements in the Ferromagnet $Pb(Fe_{0.5}, Nb_{0.5})O_3$. (E) G. L. Platonov, L. A. Drobyshev, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 692 (1970) [14, 800 (1969)]

Investigation of the $CdTiO_3-NaTaO_3$ and $CdTiO_3-BiFeO_3$ Systems. (E) V. M. Lebedev, Yu. N. Venevtsev, and G. S. Zhdanov. 14, 931 (1970) [14, 1071 (1969)]

Electron Diffraction and Electron Microscope Studies of Thin $BaTiO_3$ Condensates. (E) L. G. Rigerman, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 977 (1970) [14, 1112 (1969)]

VEREMEICHIK, T. F.

Configuration of $d^5(d^5)$-Electrons in a Monoclinic Field. (T) T. F. Veremeichik and D. T. Sviridov. 14, 704 (1970) [14, 814 (1969)]

VESELKOVA, M. M.

Influence of Point Defects on the Crystalline Structure of Zinc Sulfide Powders. (E) N. K. Morozova, M. M. Veselkova, A. F. Botnev, and K. V. Shalimova. 14, 74 (1969) [14, 95 (1969)]

VINNIK, M. A.

Numerical Notation for Describing the Structures of the Hexaferrites. (T) M. A. Vinnik and V. E. Semenov. 14, 103 (1969) [14, 126 (1969)]

The Structure of Barium Hexaferrite-Aluminates. (E) M. A. Vinnik and R. I. Zvereva. 14, 590 (1970) [14, 697 (1969)]

Structural Transformations of Fluorides above and below the Néel Temperature. (E) M. A. Vinnik and L. N. Selezneva. 14, 928(1970) [14, 1068 (1969)]

VINTAIKIN, E. Z.

Impurity-Atom Disturbance of Matrix Atoms in an Equilibrium Solid Solution. (T) E. Z. Vintaikin and G. G. Gegiadze. 14, 566 (1970) [14, 672 (1969)]

VISKOV, A. S.

X-Ray, Dielectric, and Piezoelectric Investigations of Solid Solutions in the $PbTiO_3-$"$BaNb_{4/5}O_3$" System. (E) A. S. Viskov and Yu. N. Venevtsev. 14, 379 (1969) [14, 460 (1969)]

VISTIN', L. K.

Domain Structure of Liquid Crystals. (E) L. K. Vistin' and A. P. Kapustin. 14, 638 (1970) [14, 740 (1969)]

VITOL, V. D.

X-Ray Investigation of Thermal Expansion in Synthetic and Natural Diamonds. (E) M. I. Sokhor and V. D. Vitol. 14, 632 (1970) [14, 734 (1969)]

VLASOV, A. S.

Growth of Aluminum Garnet Single Crystals Containing a Neodymium Impurity. (E) V. Z. Bychkov, S. A. Fedulov, A. S. Vlasov, B. S. Skidan, and V. K. Balashov. 14, 981 (1970) [14, 1115 (1969)]

VLASOV, V. P.

Visualization of the Domain Structure of Crystals of Triglycine Sulfate at the Electron-Microscopic Level. (E) G. I. Distler, V. P. Konstantinova, and V. P. Vlasov. 14, 70 (1969) [14, 90 (1969)]

Effects of Surface Electrical Properties of a Crystal Substrate on Crystallization. (E) G. I. Distler and V. P. Vlasov. 14, 747 (1970) [14, 872 (1969)]

VOITSEKHOVSKII, V. N.

The Microblock Structure of Hydrothermal Crystals of Corundum. (E) V. N. Voitsekhovskii, P. I. Nikitichev, Z. F. Smirnova, and L. N. Furmakova. 14, 733 (1970) [14, 852 (1969)]

VOLKOV, A. I.

Mode of Formation of Diamonds from Graphite in the Presence of Metals. (T) G. B. Bokii and A. I. Volkov. 14, 126 (1969) [14, 147 (1969)]

VOROB'EV, Yu. P.

Method of Determining the Contribution of the Defectiveness of the Components to the Overall Defectiveness of Solutions of the MeO Type from the Changes in Their Crystal-Lattice Parameters. (T/E) M. P. Bogdanovich, Yu. P. Vorob'ev, A. N. Men', and G. I. Chufarov. 14, 570 (1970) [14, 677 (1969)]

VORONKOV, V. V.

Distribution of Volatile Impurities Ahead of the Crystallization Front in a Melt. (T) B. D. Lainer, V. V. Voronkov, M. G. Mil'vidskii, and V. V. Rakov. 14, 451 (1969) [14, 537 (1969)]

Effect of Impurity Evaporation from a Melt on the Transient Period of Impurity Repulsion. (T) V. V. Voronkov, M. G. Mil'vidskii, and O. V. Pelevin. 14, 951 (1970) [14, 1091 (1969)]

VOSKRESENSKAYA, I. E.

An Infrared Spectroscopic Study of Tourmalines. (E) I. I. Plyusnina, B. G. Granadchikova, and I. E. Voskresenskaya. 14, 370 (1969) [14, 450 (1969)]

Electron Paramagnetic Resonance Study of Tourmalines. (E) A. I. Novozhilov, I. E. Voskresenskaya, and M. I. Samoilovich. 14, 416 (1969) [14, 507 (1969)]

YAMAGUCHI, S.

Hydrothermal Synthesis of Iron Thiospinel. (E) S. Yamaguchi. 14, 653 (1970) [14, 752 (1969)]

YAMZIN, I. I.

The Localization of Zn^{2+} Ions in the Hexagonal Ferrite $(Sr_{0.4}Ba_{0.2})_2Zn_2Fe_{12}O_{22}$. (E) V. A. Sizov, N. N. Agapova, and I. I. Yamzin. 14, 263 (1969) [14, 333 (1969)]

A Neutron Diffraction Study of the Structure of Magnetoplumbite. (E) O. P. Aleshko-Ozhevskii, M. K. Faek, and I. I. Yamzin. 14, 367 (1969) [14, 447 (1969)]

YANKELEVICH, R. G.

Growth of Vanadium Pentoxide Single Crystals and Their Dislocation Structure. (E) A. S. Abdullaev, L. M. Belyaev, I. V. Binarov, G. F. Dobrzhanskii, and R. G. Yankelevich. 14, 957 (1970) [14, 1095 (1969)]

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The Dielectric Dispersion of Crystals of Potassium Ferrocyanide. (E) V. M. Petrov, A. Ya. Krasnikova, and E. S. Yashumova. 14, 811 (1970) [14, 935 (1969)]

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ZAMORZAEV, A. M.

Color-Symmetry Space Groups. (T) A. M. Zamorzaev. 14, 155 (1969) [14, 195 (1969)]

ZAV'YALOVA, A. A.

On the Cubic Structure of δ-Bi_2O_3. (E) A. A. Zav'yalova and R. M. Imamov. 14, 261 (1969) [14, 331 (1969)]

On the Orientations in Thin Films of Bismuth and Its Oxide. (E) A. A. Zav'yalova and R. M. Imamov. 14, 305 (1969) [14, 369 (1969)]

ZELIKMAN, A. N.

Structural Transformations in Synthetic MoS_2. (E) A. N. Zelikman, G. V. Indenbaum, M. V. Teslitskaya, and V. P. Shalankova. 14, 687 (1970) [14, 795 (1969)]

ZEVEKE, T. A.

Preparation of Germanium Films on Sapphire by Pyrolysis of Hydrides. (E) T. A. Zeveke, T. I. Medvedeva, and N. N. Sheftal'. 14, 649 (1970) [14, 748 (1969)]

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Investigation of the $CdTiO_3$–$NaTaO_3$ and $CdTiO_3$–$BiFeO_3$ Systems. (E) V. M. Lebedev, Yu. N. Venevtsev, and G. S. Zhdanov. 14, 931 (1970) [14, 1071 (1969)]

ZHELUDEV, I. S.
Electrical Polarization of Crystals during Torsional Deformation. (E/T) I. S. Zheludev, Yu. S. Likhacheva, and N. A. Lileeva. 14, 425 (1969) [14, 514 (1969)]

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Nuclear Magnetic Resonance Investigation of the Ferroelectric Transition in $(NH_4)_2BeF_4$. I. Magnetic Shielding of the F^{19} Nuclei. (E) I. P. Aleksandrova, L. I. Zherebtsova, and T. I. Leibovich. 14, 218 (1969) [14, 279 (1969)]

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The Effect of a Strong Electric Field on the Dielectric Properties of KD_2PO_4. (E/T) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, and L. A. Bespamyatnova. 14, 141 (1969) [14, 162 (1969)]
Dielectric Properties of KDP Crystals Containing Additions of Chromium. (E) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, I. V. Gavrilova, A. N. Kovalenko, S. G. Savvinova, and A. M. Savvinov. 14, 816 (1970) [14, 940 (1969)]

ZINENKO, V. I.
Second Order Phase Transitions in Crystals with the Space Group O_h^1. (T) K. S. Aleksandrov, V. I. Zinenko, L. M. Mikhel'son, and Yu. I. Sirotin. 14, 256 (1969) [14, 327 (1969)]

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Synthesis and Mutual Solubility in Spinel Solid Solutions in Me–Ti–Fe–O Systems (Me = Zn, Co, Ni, and Mn). (E) A. A. Shchepetkin, R. G. Zakharov, M. I. Zinigrad, and G. I. Chufarov. 14, 761 (1970) [14, 889 (1969)]

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The Optical Activity of α-Quartz Irradiated by Fast Neutrons. (E) V. G. Zubov, E. A. Kadyshevich, L. P. Osipova, and A. P. Shtyrkova. 14, 535 (1970) [14, 634 (1969)]

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ZVEREVA, R. I.
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Peculiarities of Crystallization of Barium Hexaferrite on Seeds. (E) S. Sh. Gendelev, R. I. Zvereva, and L. D. Fedorovich. 14, 457 (1969) [14, 542 (1969)]

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Atomic Structure of $K_2Co(NCS)_4 \cdot 3H_2O$. (T) Z. V. Zvonkova, G. S. Zhdanov, and Z. P. Povet'eva. 14, 583 (1970) [14, 691 (1969)]
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Single Crystals of Cadmium Metatitanate and Solid Solutions Based on It. (E) M. L. Sholokhovich, O. P. Kramarov, B. F. Proskuryakov, and E. K. Zvorykina. 14, 884 (1970) [14, 1021 (1969)]

ZYKALOVA, K. A.
Crystallographic Investigation of the Bromohydrate of Gramicidin S. (E) G. N. Tishchenko and K. A. Zykalova. 14, 211 (1969) [14, 270 (1969)]

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Electrooptical Properties of Barium Titanate in the Paraelectric Phase. (E) A. S. Sonin and V. É. Perfilova. 14, 419 (1969) [14, 510 (1969)]

Electrooptical Properties of Thallium-Cadmium Langbeinite. (E) A. S. Vasilevskaya, I. G. Ganeev, I. S. Rez, and A. S. Sonin. 14, 421 (1969) [14, 511 (1969)]

The Relation of Structure to Electrooptic and Elastooptic Properties in Crystals of the KDP Group. (E/T) A. S. Vasilevskaya and A. S. Sonin. 14, 611 (1970) [14, 713 (1969)]

The Electrooptic Effect in Optically Heterogeneous Crystals. (T) V. A. Shamburov. 14, 875 (1970) [14, 1009 (1969)]

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Use of the Mössbauer Effect to Study the Distribution of Fe and Sn Impurity Atoms in Vanadium Pentoxide. (E) A. A. Abdullaev, L. M. Belyaev, T. V. Dmitrieva, G. F. Dobrzhanskii, V. V. Ilyukhin, and I. S. Lyubutin. 14, 389 (1969) [14, 473 (1969)]

Infrared Dichroism Study of Liquid Crystals of n-Alkoxybenzoic Acids. (E) M. M. Kusakov, V. L. Khodzhaeva, M. V. Shiskhkina, and I. I. Konstantinov. 14, 398 (1969) [14, 485 (1969)]

Absorption Spectra of Yttrium Aluminum Garnet (YAG) Crystals with Contaminant Ions of the Iron Group. (E) P. A. Arsen'ev and D. T. Sviridov. 14, 578 (1970) [14, 687 (1969)]

Laser Emission from CaF_2-YF_3 Crystals Containing Ho^{3+} and Er^{3+}. (E) M. V. Dmitruk and A. A. Kaminskii. 14, 620 (1970) [14, 722 (1969)]

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Interpretation of Optical Activity in Crystals of Salts of Dithionic Acid with Monovalent Cations. (T/E) Z. B. Perekalina and N. L. Smirnova. 14, 708 (1970) [14, 820 (1969)]

Diffraction Topography by Scanning with a Wide X-Ray Beam. (E) V. G. Lyuttsau and Yu. M. Fishman. 14, 720 (1970) [14, 835 (1969)]

Investigation of the Electron Paramagnetic Resonance of Nd^{3+} in CeO_2. (E) R. Yu. Abdulsabirov, Z. N. Zonn, and A. N. Katyshev. 14, 793 (1970) [14, 919 (1969)]

A Laser Based on $SrF_2-YF_3-Nd^{3+}$ Crystals. (E) L. S. Garashina, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 799 (1970) [14, 925 (1969)]

Polarization of Electromagnetic Waves in Optically Active Crystals. (T) B. V. Bokut'. 14, 870 (1970) [14, 1002 (1969)]

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Crystal Structure of Solid Solutions in the ZnSe–CdSe System. (E) K. V. Shalimova, A. F. Botnev, V. A. Dmitriev, N. Z. Kognovitskaya, and V. V. Starostin. 14, 531 (1970) [14, 629 (1969)]

The Structure of Barium Hexaferrite-Aluminates. (E) M. A. Vinnik and R. I. Zvereva. 14, 590 (1970) [14, 697 (1969)]

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Diffraction Topography by Scanning with a Wide X-Ray Beam. (E) V. G. Lyuttsau and Yu. M. Fishman. 14, 720 (1970) [14, 835 (1969)]

The Crystal Structure of Palladium Telluride $Pd_{4-x}Te$. (E) V. S. Khar'kin, R. M. Imamov, and S. A. Semiletov. 14, 779 (1970) [14, 907 (1969)]

Electron Diffraction Investigation of the Phase Formation and the Kinetics of Phase Transformations in the Ag–Se System. (E) G. A. Efendiev, I. R. Nuriev, and R. B. Shafizdade. 14, 787 (1970) [14, 915 (1969)]

Three-Beam Borrmann Effect in Germanium. (E) A. A. Kantsel'son, V. I. Kisin, and N. A. Polyakova. 14, 839 (1970) [14, 965 (1969)]

Crystal Structure of $CeNiSi_2$ and Kindred Compounds. (E) O. P. Bodak and E. I. Gladyshevskii. 14, 859 (1970) [14, 990 (1969)]

X-Ray Topography of the Ferromagnetic Domains of Silicon Iron. (E) V. P. Makarov and B. V. Molotilov. 14, 945 (1970) [14, 1084 (1969)]

Oriented Crystallization of Gold on a Sodium Chloride Crystal Surface through an Amorphous Carbon Film. (T) Yu. M. Gerasimov and G. I. Distler. 14, 964 (1970) [14, 1101 (1969)]

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A Neutron Diffraction Study of the Structure of Magnetoplumbite. (E) O. P. Aleshko-Ozhevskii, M. K. Faek, and I. I. Yamzin. 14, 367 (1969) [14, 447 (1969)]

Neutron-Diffraction Study of the Decomposition and Ordering in the Niobium—Hydrogen System. (E/T) V. A. Somenkov, V. F. Petrunin, S. Sh. Shil'shtein, and A. A. Chertkov. 14, 522 (1970) 14, 617 (1969)]

Neutron Diffraction Study of Zirconium Carbohydride. (E) V. N. Bykov, V. S. Golovkin, V. P. Kalinin, V. A. Levdik, and V. I. Shcherbak. 14, 785 (1970) [14, 913 (1969)]

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X-Ray Analysis of the Structure of Para-Azoxyanisole in an Alternating Electric Field. (E) E. A. Kosterin and I. G. Chistyakov. 14, 252 (1969) [14, 321 (1969)]

Temperature Dependence of the Unit Cell Parameters of Aluminum Methyl Ammonium Sulfate in Phases I and II. (E) V. M. Kozhin and M. P. Zaitseva. 14, 277 (1969) [14, 344 (1969)]

Crystal and Molecular Structure of α-Chloroanthraquinone. (E) N. L. Klimasenko and G. A. Gol'der. 14, 586 (1970) [14, 694 (1969)]

Crystal Structure of N-Thiocyanogen Phenylene. (E) Z. P. Povet'eva, Z. V. Zvonkova, and V. P. Glushkova. 14, 588 (1970) [14, 696 (1969)]

Crystal Structure of Chloro-Bis-Dimethyl-Ammonium Glyoximate of Cobalt (III). (E) T. I. Malinovskii, Yu. A. Simonov, and B. M. Shchedrin. 14, 863 (1970) [14, 995 (1969)]

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Nuclear Magnetic Resonance Investigation of the Ferroelectric Transition in $(NH_4)_2BeF_4$. I. Magnetic Shielding of the F^{19} Nuclei. (E) I. P. Aleksandrova, L. I. Zherebtsova, and T. I. Leibovich. 14, 218 (1969) [14, 279 (1969)]

Electron Paramagnetic Resonance Study of Tourmalines. (E) A. I. Novozhilov, I. E. Voskresenskaya, and M. I. Samoilovich. 14, 416 (1969) [14, 507 (1969)]

The Nuclear Magnetic Resonance of D^2 in the $(ND_4)_2BeF_4$ Crystal. (E) I. P. Aleksandrova and V. N. Shcherbakov. 14, 608 (1970) [14, 711 (1969)]

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X-Ray Investigation of a Natural Diamond with Garnet Inclusions in the Form of a Crystallized Silicate Melt. (E) S. I. Futergendler. 14, 248 (1969) [14, 317 (1969)]

Crystal Structure of Zinc Chkalovite $Na_2Zn[Si_2O_6]$. (E) E. L. Belokoneva, Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov. 14, 918 (1970) [14, 1060 (1969)]

Crystal Structure of a Synthetic Iron Beryllosilicate: $Fe_3BeSi_2O_8(F, OH)_2$. (E) V. V. Bakakin and L. P. Solov'eva. 14, 920 (1970) [14, 1063 (1969)]

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Geometry of the Diffraction Patterns of Slow Electrons Reflected by the Surface of Crystals with a NaCl Lattice Type. (E) I. F. Dvoryankin, A. Yu. Mityagin, and V. P. Orlov. 14, 776 (1970) [14, 904 (1969)]

Simple and Binary Inorganic Compounds (X-Ray Diffraction)

Structure of Cadmium Sulfide Films Sublimated onto Slid Faces of Single NaCl, KCl, and KBr Faces. (E) A. G. Mikolaichuk, Ya. I. Dutchak, and D. M. Freik. 14, 148 (1969) [14, 167 (1969)]

X-Ray Investigation of a Naiural Diamond with Garnet Inclusions in the Form of a Crystallized Silicate Melt. (E) S. I. Futergendler. 14, 248 (1969) [14, 317 (1969)]

The Structure of Selenium. (E) A. S. Avilov and R. M. Imamov. 14, 259 (1969) [14, 330 (1969)]

On the Cubic Structure of δ-Bi_2O_3. (E) A. A. Zav'yalova and R. M. Imamov. 14, 261 (1969) [14, 331 (1969)]

Nature of the Inclusions in Gold-Doped Germanium Single Crystals. (E) V. G. Fomin and M. G. Mil'vidskii. 14, 281 (1969) [14, 348 (1969)]

Use of X-Ray Microanalysis for Investigation of β-SiC Crystals by the Vapor-Liquid-Solid Mechanism. (E) V. V. Bakovets and G. V. Berdichevskii. 14, 444 (1969) [14, 531 (1969)]

Ternary and More Complicated Inorganic Compounds (X-Ray Diffraction)

Determination of the Crystal Structure of $Na_2Mn_2Si_2O_7$ by the Superposition Method. (E) L. P. Astakhova and V. I. Simonov. 14, 1 (1969) [14, 3 (1969)]

Determination of the Structure of Gadolinium Oxyorthosilicate $Gd_2O_3 \cdot SiO_2$. (T) Yu. I. Smolin and S. P. Tkachev. 14, 14 (1969) [14, 22 (1969)]

X-Ray Investigation of Sodium-Lanthanum Molybdates. (E) Ts. S. Shugal, I. M. Britan, and L. P. Shklover. 14, 93 (1969) [14, 118 (1969)]

Synthetic Series of Sodium Rare-Earth Silicates and Germanates. (E) A. V. Chichagov, B. N. Litvin, and N. V. Belov. 14, 95 (1969) [14, 119 (1969)]

Structure of Potassium, Rubidium, and Cesium Nickelates of Composition Me_xNiO_2. (E) P. N. Bityutskii and V. I. Khitrova. 14, 99 (1969) [14, 122 (1969)]

Numerical Notation for Describing the Structures of the Hexaferrites. (T) M. A. Vinnik and V. E. Semenov. 14, 103 (1969) [14, 126 (1969)]

Determination of Mean Square Deviation Amplitudes of Atoms of Specific Sublattices in Ferrites with Spinel Structure. (T/E) D. M. Mazo. 14, 105 (1969) [14, 128 (1969)]

Dihedral Angles in Crystalline Condensed Phosphates. (T) A. I. Soklakov and N. L. Portnova. 14, 119 (1969) [14, 141 (1969)]

Slip Elements and Dislocation Reactions in Ammonium Dihydrophosphate Crystals. (E) N. A. Pasternak, Yu. M. Fishman, N. F. Kirilyuk, and A. A. Predvoditelev. 14, 243 (1969) [14, 310 (1969)]

The Localization of Zn^{2+} Ions in the Hexagonal Ferrite $(Sr_{0.8}Ba_{0.2})_2Zn_2F_{12}O_{22}$. (E) V. A. Sizov, N. N. Agapova, and I. I. Yamzin. 14, 263 (1969) [14, 333 (1969)]

Perovskite Type Structures of Aluminate Rare-Earth Elements. (T/E) N. V. Margolis and Yu. P. Udalov. 14, 265 (1969) [14, 331 (1969)]

Hindered Motion of the Tetrahedral Groups $[BeF_4]$ in Cs_2BeF_4. (T/E) I. P. Aleksandrova. 14, 268 (1969) [14, 337 (1969)]

X-Ray Investigation of Crystallization Processes in Antimony Trisulfide Films. (E) E. M. Smirnova, T. A. Mingazin, and M. N. Odlis. 14, 303 (1969) [14, 367 (1969)]

Synthesis of Single Crystals of Ternary Chalcohalides of the $A^VB^VI C^{VII}$ Group. (E) V. I. Popolitov. 14, 312 (1969) [14, 375 (1969)]

Determination of the Crystal Structures of Several Three-Component Semiconductors with the General Formula ABX_2. (E) A. S. Avilov, K. A. Agaev, G. G. Guseinov, and R. M. Imamov. 14, 364 (1969) [14, 443 (1969)]

X-Ray, Dielectric, and Piezoelectric Investigations of Solid Solutions in the $PbTiO_3$–"$BaNb_4/_3O_3$" System. (E) A. S. Viskov and Yu. N. Venevtsev. 14, 379 (1969) [14, 460 (1969)]

Effect of Temperature on the Texture of Nematic Paraazoxyanisole Oriented by an Electric Field. (E) E. A. Kosterin. 14, 435 (1969) [14, 524 (1969)]

Peculiarities of Crystallization of Barium Hexaferrite on Seeds. (E) S. Sh. Gendelev, R. I. Zvereva, and L. D. Fedorovich. 14, 457 (1969) [14, 542 (1969)]

Features of the Crystal Structure of $Li_3Fe[WO_4]_2$. (E) R. F. Klevtsova and S. V. Borisov. 14, 515 (1970) [14, 610 (1969)]

Crystal Structure of a Ditungstate (K, Nd)Nd$[WO_4]_2$. (E) L. P. Solov'eva and S. V. Borisov. 14, 518 (1970) [14, 613 (1969)]

Atomic Structure of $K_2Co(NCS)_4 \cdot 3H_2O$. (T) Z. V. Zvonkova, G. S. Zhdanov, and Z. P. Povet'eva. 14, 583 (1970) [14, 691 (1969)]

The Structure of Barium Hexaferrite-Aluminates. (E) M. A. Vinnik and R. I. Zvereva. 14, 590 (1970) [14, 697 (1969)]

High-Temperature X-Ray and Dielectric Investigation of Bi_2WO_6. (E) I. G. Ismailzade and F. A. Mirishli. 14, 636 (1970) [14, 738 (1969)]

Electron-Diffraction and X-Ray-Diffraction Investigation of Atomic Displacements in the Ferromagnet $Pb(Fe_{0.5}, Nb_{0.5})O_3$. (E) G. L. Platonov, L. A. Drobyshev, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 692 (1970) [14, 800 (1969)]

The Crystal Structure of $NdWO_4OH$. (E) R. F. Klevtsova and S. V. Borisov. 14, 776 (1970) [14, 904 (1969)]

The Crystal Structure of Barium Iron (IV) Oxides in the System $BaFeO_3$–$BaFeO_{2.5}$. (E) I. N. Belyaev, E. G. Fesenko, V. S. Filip'ev, and I. G. Kokarovtseva. 14, 782 (1970) [14, 910 (1969)]

Neutron Diffraction Study of Zirconium Carbohydride. (E) V. N. Bykov, V. S. Golovkin, V. P. Kalinin, V. A. Levdik, and V. I. Shcherbak. 14, 785 (1970) [14, 913 (1969)]

Errors in Powder-Pattern Determination of Cell Parameters in Low-Symmetry Crystals. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 849 (1970) [14, 978 (1969)]

The Crystal Structure of Ytterbium Oxyorthosilicate Yb_2SiO_5. (E) Yu. I. Smolin. 14, 854 (1970) [14, 985 (1969)]

Crystal Structure of $CeNiSi_2$ and Kindred Compounds. (E) O. P. Bodak and E. I. Gladyshevskii. 14, 859 (1970) [14, 990 (1969)]

Single Crystals of Cadmium Metatitanate and Solid Solutions Based on It. (E) M. L. Sholokhovich, O. P. Kramarov, B. F. Proskuryakov, and E. K. Zvorykina. 14, 884 (1970) [14, 1021 (1969)]

X-Ray Diffraction Study of the Crystalline Hydrates of the Perrhenates of the Alkaline Earth Metals. (E) M. B. Varfolomeev, I. P. Chupakhin, and V. E. Plyushchev. 14, 924 (1970) [14, 1065 (1969)]

Synthesis and Structural Studies of Some Perovskites Which Contain Bismuth. (E) E. T. Shuvaeva and E. G. Fesenko. 14, 926 (1970) [14, 1066 (1969)]

Investigation of the $CdTiO_3$–$NaTaO_3$ and $CdTiO_3$–$BiFeO_3$ Systems. (E) V. M. Lebedev, Yu. N. Venevtsev, and G. S. Zhdanov. 14, 931 (1970) [14, 1071 (1969)]

CRYSTALLOGRAPHIC PHYSICAL CHEMISTRY

Chemical Binding in Crystals

Interactions of the C...O... and O...O Atoms in CO_2 Crystals. (E) A. I. Kitaigorodskii, K. V. Mirskaya, and V. V. Nauchitel'. 14, 769 (1970) [14, 900 (1969)]

Phase Changes, Constitution Diagrams

Theory of Order–Disorder Phase Transitions in Certain Molecular Crystals. I. (T) D. A. Badalyan. 14, 36 (1969) [14, 48 (1969)]

Successive Transitions in a Potassium Ferrocyanide Crystal. (T) V. Kh. Kozlovskii. 14, 138 (1969) [14, 159 (1969)]

Second Order Phase Transitions in Crystals with the Space Group O_h^1. (T) K. S. Aleksandrov, V. I. Zinenko, L. M. Mikhel'son, and Yu. I. Sirotin. 14, 256 (1969) [14, 327 (1969)]

Phase Conversions in Liquid Crystals of the Homologs of Dialkoxyazoxybenzene. (E/T) A. P. Kapustin and L. I. Mart'yanova. 14, 394 (1969) [14, 480 (1969)]

The Role of Crystal Structure Type in the Theory of Second-Order Phase Transitions. (T) L. M. Mikhel'son and Yu. I. Sirotin. 14, 485 (1970) [14, 573 (1969)]

Phases in the System PbTe–Bi_2Te_3 and Their Atomic Structures. (E) B. K. Vainshtein, R. M. Imamov, and A. G. Talybov. 14, 597 (1970) [14, 703 (1969)]

On the Structure of Certain Phases in the Copper-Sulfur System. (E) M. M. Kazinets. 14, 599 (1970) [14, 704 (1969)]

An Ordered Phase on Quadrupled Repeat Distance on the Basis of a bcc Lattice. (E) Yu. O. Mezhennyi, Yu. A. Skakov, S. K. Maksimov, and V. B. Spiridonov. 14, 601 (1970) [14, 706 (1969)]

Crystal Optics of Strontium Vanadates and Phase Diagram of V_2O_5–SrO System. (E) A. A. Fotiev and V. A. Makarov. 14, 621 (1970) [14, 723 (1969)]

Structural Transformations in Synthetic MoS_2. (E) A. N. Zelikman, G. V. Indenbaum, M. V. Teslitskaya, and V. P. Shalankova. 14, 687 (1970) [14, 795 (1969)]

Synthesis and Mutual Solubility in Spinel Solid Solutions in Me–Ti–Fe–O Systems (Me = Zn, Co, Ni, and Mn). (E) A. A. Shchepetkin, R. G. Zakharov, M. I. Zinigrad, and G. I. Chufarov. 14, 761 (1970) [14, 889 (1969)]

Electron Diffraction Investigation of the Phase Formation and the Kinetics of Phase Transformations in the Ag–Se System. (E) G. A. Efendiev, I. R. Nuriev, and R. B. Shafizdade. 14, 787 (1970) [14, 915 (1969)]

Structural Transformations of Fluorides above and below the Néel Temperature. (E) M. A. Vinnik and L. N. Selezneva. 14, 928 (1970) [14, 1068 (1969)]

Investigation of the $CdTiO_3$–$NaTaO_3$ and $CdTiO_3$–$BiFeO_3$ Systems. (E) V. M. Lebedev, Yu. N. Venevtsev, and G. S. Zhdanov. 14, 931 (1970) [14, 1071 (1969)]

ELECTRICAL PROPERTIES OF CRYSTALS

Charge Separation by Crystallization. (R) A. M. Mel'nikova. 14, 464 (1969) [14, 548 (1969)]

Configuration of d^3)d^1)-Electrons in a Monoclinic Field. (T) T. F. Veremeichik and D. T. Sviridov. 14, 704 (1970) [14, 814 (1969)]

Effects of Surface Electrical Properties of a Crystal Substrate on Crystallization. (E) G. I. Distler and V. P. Vlasov. 14, 747 (1970) [14, 872 (1969)]

Influence of Temperature on the Luminescence and Photoelectret State of Silver Halides. (E) V. K. Marinchuk, V. M. Belous, and V. I. Bugrienko. 14, 880 (1970) [14, 1016 (1969)]

Electrical Properties of the Surfaces of Ionic Crystals. (E) G. -I. Distler and E. I. Tokmakova. 14, 913 (1970) [14, 1055 (1969)]

Mass Transfer in a Hollow-Cathode Discharge. (E) K. A. Oganezov, A. Kh. Chamagua, and B. Ya. Chikhladze. 14, 963 (1970) [14, 1100 (1969)]

Electrical Properties of Linear Dielectrics

Sound of the Principal Optical and Dielectric Properties of Barium Titanate Single Crystals Containing Added Nickel Grown from a Potassium Fluoride Melt. (E) P. Coufová and J. Novák. 14, 61 (1969) [14, 79 (1969)]

The Effect of a Strong Electric Field on the Dielectric Properties of KD_2PO_4. (E/T) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, and L. A. Bespamyatnova. 14, 141 (1969) [14, 162 (1969)]

The Dielectric Properties of SbSI as a Function of Temperature and Hydrostatic Pressure. (E) E. I. Gerzanich and V. M. Fridkin. 14, 234 (1969) [14, 298 (1969)]

X-Ray, Dielectric, and Piezoelectric Investigations of Solid Solutions in the $PbTiO_3$ – "$BaNb_{1/2}O_3$" System. (E) A. S. Viskov and Yu. N. Venevtsev. 14, 379 (1969) [14, 460 (1969)]

New Crystals Belonging to the Family of Alkali Trihydroselenites, the Ferroelectric $RbH_3(SeO_3)_2$ and the Linear Dielectric $NH_4H_3 \cdot (SeO_3)_2$. (E) L. A. Shuvalov, N. R. Ivanov, N. V. Gordeva, and L. F. Kirpichnikova. 14, 554 (1970) [14, 658 (1969)]

High-Temperature X-Ray and Dielectric Investigation of Bi_2WO_6. (E) I. G. Ismailzade and F. A. Mirishli. 14, 636 (1970) [14, 738 (1969)]

The Dielectric Dispersion of Crystals of Potassium Ferrocyanide. (E) V. M. Petrov, A. Ya. Krasnikova, and E. S. Yashumova. 14, 811 (1970) [14, 935 (1969)]

Dielectric Properties of KDP Crystals Containing Additions of Chromium. (E) L. N. Kamysheva, N. A. Burdanina, O. K. Zhukov, I. V. Gavrilova, A. N. Kovalenko, S. G. Savvinova, and A. M. Savvinov. 14, 816 (1970) [14, 940 (1969)]

Irradiation Effects

Effect of Small Doses of Neutron Irradiation on the Range of the Leading Dislocations of a Star of Etch Figures in Alkali Halide Crystals. (E) E. B. Gusev, I. B. Berman, and M. P. Shaskol'skaya. 14, 117 (1969) [14, 139 (1969)]

The Optical Activity of α-Quartz Irradiated by Fast Neutrons. (E) V. G. Zubov, E. A. Kadyshevich, L. P. Osipova, and A. P. Shtyrkova. 14, 535 (1970) [14, 634 (1969)]

Internal Stresses and Refractive Index of Quartz Irradiated with Fast Neutrons. (E) A. P. Shtyrkova. 14, 624 (1970) [14, 726 (1969)]

Anisotropy of the Radiative Reinforcement of Zinc Single Crystals. (E) O. A. Troitskii, L. G. Maistrenko, and N. P. Yatsenko. 14, 821 (1970) [14, 944 (1969)]

The Defect Structure of γ- and X-Irradiated Alkali Halide Crystals. (E) E. V. Kolontsova and V. M. Linnik. 14, 903 (1970) [14, 1044 (1969)]

The Amorphization of Silicon Crystals on Irradiation with Fast Ions. (E) V. M. Gusev, Yu. V. Martynenko, and K. V. Starinin. 14, 908 (1970) [14, 1050 (1969)]

Structures and Electrical Properties of Ferroelectrics, Piezoelectrics, Pyroelectrics

Sound of the Principal Optical and Dielectric Properties of Barium Titanate Single Crystals Containing Added Nickel Grown from a Potassium Fluoride Melt. (E) P. Coufová and J. Novák. 14, 61 (1969) [14, 79 (1969)]

Electrical Polarization of Crystals during Torsional Deformation. (E/T) I. S. Zheludev, Yu. S. Likhacheva, and N. A. Lileeva. 14, 425 (1969) [14, 514 (1969)]

The Growth of Potassium Hydrogen Phthalate Crystals and Their Optical, Piezoelectric, and Elastic Properties. (E) L. M. Belyaev, G. S. Belikova, A. B. Gil'varg, and I. M. Sil'vestrova. 14, 544 (1970) [14, 645 (1969)]

New Crystals Belonging to the Family of Alkali Trihydroselenites, the Ferroelectric $RbH_3(SeO_3)_2$ and the Linear Dielectric $NH_4H_3 \cdot (SeO_3)_2$. (E) L. A. Shuvalov, N. R. Ivanov, N. V. Gordeva, and L. F. Kirpichnikova. 14, 554 (1970) [14, 658 (1969)]

The Thermal Expansion of Potassium Dihydrogen Phosphate in the Vicinity of the Ferroelectric Phase Transition. (E) A. A. Boiko and Liu Tan Fat. 14, 712 (1970) [14, 825 (1969)]

The Space Charges and Electrical Properties of Single Crystals of Barium Titanate. (E) V. Z. Borodin, S. G. Gakh, M. I. Gorelov, and V. G. Kuznetsov. 14, 805 (1970) [14, 929 (1969)]

Synthesis, Dielectric, and X-Ray Investigation of Some New Lamellar Ferroelectrics of the (A Bi)$Bi_4Ti_4FeO_{18}$ (A = Ca, Sr, Pb, Ba) Type. (E) F. A. Mirishli and I. G. Ismailzade. 14, 809 (1970) [14, 933 (1969)]

Characteristic Features of the Pyroelectric Effect and Electrical Conductivity in Single Crystals of $LiNbO_3$ in the Range 20-250°C. (E) M. B. Roitberg, V. K. Novik, and N. D. Gavrilova. 14, 814 (1970) [14, 938 (1969)]

Investigation of the Infrared Absorption Spectra of Triglycinsulfate Crystal in Polarized Light during the Ferroelectric Phase Transition. (E) G. S. Danil'chuk, M. A. Raskovskii, and I. S. Kremenchugskii. 14, 866 (1970) [14, 998 (1969)]

The Difference in the Mechanisms of the Movement of the Domain Walls in Crystals of Rochelle Salt Close to the Upper and Lower Curie Points. (T/E) A. V. Shil'nikov, E. S. Popov, and S. L. Rapoport. 14, 890 (1970) [14, 1028 (1969)]

Effect of Illumination on Polarization Reversal in the Ferroelectric Semiconductor SbSI Using the Barkhausen Effect. (E) A. A. Bogomolov, V. V. Ivanov, and V. M. Rudyak. 14, 894 (1970) [14, 1033 (1969)]

Electron Diffraction and Electron Microscope Studies of Thin $BaTiO_3$ Condensates. (E) L. G. Rigerman, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 977 (1970) [14, 1112 (1969)]

MAGNETIC PROPERTIES OF CRYSTALS

Use of the Mössbauer Effect in Determining the Magnetic Structure of Crystals. (T) M. A. Andreeva and R. N. Kuz'min. 14, 605 (1970) [14, 708 (1969)]

Growing, Structure, and Magnetic Properties of $PbMn_{1/2}Nb_{1/2}O_3$ Single Crystals. (E) L. A. Drobyshev, B. I. Al'shin, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 634 (1970) [14, 736 (1969)]

MECHANICAL PROPERTIES OF CRYSTALS

Elasticity of Crystals, Internal Friction

The Growth of Potassium Hydrogen Phthalate Crystals and Their Optical, Piezoelectric, and Elastic Properties. (E) L. M. Belyaev, G. S. Belikova, A. B. Gil'varg, and I. M. Sil'vestrova. 14, 544 (1970) [14, 645 (1969)]

The Relation of Structure to Electrooptic and Elastooptic Properties in Crystals of the KDP Group. (E/T) A. S. Vasilevskaya and A. S. Sonin. 14, 611 (1970) [14, 713 (1969)]

Plasticity of Fiber Crystals Grown by Different Methods. (E) E. Khartmann, V. N. Rozhanskii, and A. P. Kruzhilina. 14, 828 (1970) [14, 951 (1969)]

Microhardness and Dislocation Rosettes

Multiplication of Dislocations under the Joint Action of Periodic and Increasing Stresses. (E) R. I. Garber and T. T. Mogil'nikova. 14, 115 (1969) [14, 137 (1969)]

Effect of Small Doses of Neutron Irradiation on the Range of the Leading Dislocations of a Star of Etch Figures in Alkali Halide Crystals. (E) E. B. Gusev, I. B. Berman, and M. P. Shaskol'skaya. 14, 117 (1969) [14, 139 (1969)]

Interaction of Nonparallel Dislocations in an Anisotropic Medium. (T) S. S. Orlov and V. L. Indenbom. 14, 675 (1970) [14, 780 (1969)]

Microhardness Anisotropy of Semiconductor Single Crystals with the Würtzite, Sphalerite, and Diamond Structure. (E) L. G. Tsinzerling, E. S. Berkovich, L. A. Sysoev, and M. P. Shaskol'skaya. 14, 897 (1970) [14, 1037 (1969)]

Plastic Deformation

On the Configurations of the Atomic Planes Bordering a Crack. (E) M. Kh. Blekherman and G. I. Natsvishvili. 14, 284 (1969) [14, 351 (1969)]

Statistical Investigation of Slip Line Pairs in LiF Single Crystals. (T/E) V. M. Borzhkovskaya. 14, 716 (1970) [14, 829 (1969)]

The Difference in the Mechanisms of the Movement of the Domain Walls in Crystals of Rochelle Salt Close to the Upper and Lower Curie Points. (T/E) A. V. Shil'nikov, E. S. Popov, and S. L. Rapoport. 14, 890 (1970) [14, 1028 (1969)]

Slip Lines in CdS after Plastic Deformation. (E) A. A. Blistanov, O. M. Kugaenko, V. V. Geras'kin, and M. P. Shaskol'skaya. 14, 941 (1970) [14, 1080 (1969)]

Stress Distributions

Multiplication of Dislocations under the Joint Action of Periodic and Increasing Stresses. (E) R. I. Garber and T. T. Mogil'nikova. 14, 115 (1969) [14, 137 (1969)]

On the Configurations of the Atomic Planes Bordering a Crack. (E) M. Kh. Blekherman and G. I. Natsvlishvili. 14, 284 (1969) [14, 351 (1969)]

Internal Stresses and Refractive Index of Quartz Irradiated with Fast Neutrons. (E) A. P. Shtyrkova. 14, 624 (1970) [14, 726 (1969)]

Effect of State of Lead Impurity on Mechanical Properties of Potassium Chloride and Sodium Chloride Crystals. (E) O. V. Obukhova, M. M. Tagieva, and M. P. Shaskol'skaya. 14, 825 (1970) [14, 948 (1969)]

Twinning

Twinning and Birefringence in Rhombic $KMnF_3$. (E) K. S. Aleksandrov and L. M. Reshchikova. 14, 614 (1970) [14, 716 (1969)]

OPTICAL PROPERTIES OF CRYSTALS

Sound of the Principal Optical and Dielectric Properties of Barium Titanate Single Crystals Containing Added Nickel Grown from a Potassium Fluoride Melt. (E) P. Coufová and J. Novák. 14, 61 (1969) [14, 79 (1969)]

Selection Rule for the Second Order Raman and Infrared Absorption Spectra for Crystals. (T) V. S. Gorelik. 14, 108 (1969) [14, 132 (1969)]

Production and Optical Properties of $Bi_{12}GeO_{20}$ Single Crystals. (E) A. I. Safonov, S. A. Baryshev, T. I. Nikoforova, G. N. Antonov, and S. A. Fedulov. 14, 131 (1969) [14, 152 (1969)]

Magnetoelectric Effect and Irreversible Light Propagation in Crystals. (T) V. N. Lyubimov. 14, 168 (1969) [14, 213 (1969)]

Optical Activity of Crystals in Directions Different from that of the Optic Axis. I. Uniaxial Crystals. (E) A. F. Konstantinova, N. R. Ivanov, and B. N. Grechushnikov. 14, 222 (1969) [14, 283 (1969)]

Rotation of the Plane of Polarization of Light in the $Rb_2Se_2O_6$ Crystal. (E) Z. B. Perekalina, R. N. Shchelokov, and V. I. Burkov. 14, 270 (1969) [14, 338 (1969)]

The Absorption Spectrum of Olivine. (E) S. V. Grum-Grzhimailo, O. N. Boksha, and T. M. Varina. 14, 272 (1969) [14, 339 (1969)]

Anisotropy of Light Scattering at Microscopic Defects in Artificial Quartz. (E) N. M. Melankholin, E. V. Antonov, I. N. Guseva, L. A. Gordienko, and V. E. Khadzhi. 14, 376 (1969) [14, 456 (1969)]

Use of the Mössbauer Effect to Study the Distribution of Fe and Sn Impurity Atoms in Vanadium Pentoxide. (E) A. A. Abdullaev, L. M. Belyaev, T. V. Dmitrieva, G. F. Dobrzhanskii, V. V. Ilyukhin, and I. S. Lyubutin. 14, 389 (1969) [14, 473 (1969)]

Infrared Dichroism Study of Liquid Crystals of n-Alkoxybenzoic Acids. (E) M. M. Kusakov, V. L. Khodzhaeva, M. V. Shishkhkina, and I. I. Konstantinov. 14, 398 (1969) [14, 485 (1969)]

Yttrium Aluminate Containing TR^{3+} Ions as an Active Medium for Lasers. (E) Kh. S. Bagdasarov, G. A. Bogomolova, A. A. Kaminskii, A. M. Kevorkov, and G. I. Rogov. 14, 423 (1969) [14, 513 (1969)]

The Optical Activity of Cholesteryl Propionate–p-Azoxyanisole Mixtures. (E) V. N. Aleksandrov and I. G. Chistyakov. 14, 431 (1969) [14, 520 (1969)]

The Optical Activity of α-Quartz Irradiated by Fast Neutrons. (E) V. G. Zubov, E. A. Kadyshevich, L. P. Osipova, and A. P. Shtyrkova. 14, 535 (1970) [14, 634 (1969)]

The Growth of Potassium Hydrogen Phthalate Crystals and Their Optical, Piezoelectric, and Elastic Properties. (E) L. M. Belyaev, G. S. Belikova, A. B. Gil'varg, and I. M. Sil'vestrova. 14, 544 (1970) [14, 645 (1969)]

Investigation of Color Centers in Alkali Halide Crystals at the Electron Microscopic Level. (E) G. I. Distler, V. N. Lebedeva, and V. V. Moskvin. 14, 559 (1970) [14, 664 (1969)]

Some Effects Associated with Compton Scattering in Single Crystals. (E) I. V. Telegina and E. V. Kolontsova. 14, 603 (1970) [14, 707 (1969)]

Twinning and Birefringence in Rhombic $KMnF_3$. (E) K. S. Aleksandrov and L. M. Reshchikova. 14, 614 (1970) [14, 716 (1969)]

Anomalous Double Refraction in Crystals of Potassium Dihydrogen Phosphate. (E) A. V. Belyustin, V. N. Portnov, and N. S. Stepanova. 14, 617 (1970) [14, 719 (1969)]

Laser Emission from CaF_2–YF_3 Crystals Containing Ho^{3+} and Er^{3+}. (E) M. V. Dmitruk and A. A. Kaminskii. 14, 620 (1970) [14, 722 (1969)]

Crystal Optics of Strontium Vanadates and Phase Diagram of V_2O_5–SrO System. (E) A. A. Fotiev and V. A. Makarov. 14, 621 (1970) [14, 723 (1969)]

Internal Stresses and Refractive Index of Quartz Irradiated with Fast Neutrons. (E) A. P. Shtyrkova. 14, 624 (1970) [14, 726 (1969)]

Piezooptic Constants of LiF, NaF, NaCl, NaI, KCl, KBr, KI, and RbI Single Crystals. (E) S. S. Gorbach, L. A. Deptsova, G. F. Dobrzhanskii, V. Yu. Markovskii, and M. P. Shaskol'skaya. 14, 627 (1970) [14, 729 (1969)]

Characteristics of Radiation Color Centers and Microisomorphism in Crystals. (R) M. I. Samilovich and L. I. Tsinober. 14, 656 (1970) [14, 755 (1969)]

Calculation of the Spectrum of Small Vibrations and Characteristic Temperature of Crystalline Naphthalene. (T) A. I. Kitaigorodskii and E. I. Mukhtarov. 14, 678 (1970) [14, 784 (1969)]

Interpretation of Optical Activity in Crystals of Salts of Dithionic Acid with Monovalent Cations. (T/E) Z. B. Perekalina and N. L. Smirnova. 14, 708 (1970) [14, 820 (1969)]

The Polarization of X Rays by Real Crystals and the Determination of Their Mosaic Structure. (T/E) N. M. Olekhnovich. 14, 724 (1970) [14, 840 (1969)]

Employment of the Principal Orientations of Crystals with Rhombic Symmetry in Calculating EPR Spectral Constants. (E) B. N. Grechushnikov and V. F. Koryagin. 14, 791 (1970) [14, 917 (1969)]

Investigation of the Electron Paramagnetic Resonance of Nd^{3+} in CeO_2. (E) R. Yu. Abdulsabirov, Z. N. Zonn, and A. N. Katyshev. 14, 793 (1970) [14, 919 (1969)]

Rotation of the Optic Axis of a Rochelle Salt Crystal by an Electric Field. (E) I. T. Tukhtasunov and V. A. Shamburov. 14, 800 (1970) [14, 925 (1969)]

The Optical Activity of Bismuth Compounds. (E) V. N. Batog, V. I. Burkov, V. A. Kizel', V. A. Madii, G. M. Safronov, and V. M. Skorikov. 14, 803 (1970) [14, 928 (1969)]

PERSONAL

Valentina Ivanovna Iveronova (On Her Sixtieth Birthday). 14, 152 (1969) [14, 171 (1969)]

Boris Yakovlevich Pines (1905-1968). 14, 317 (1969) [14, 380 (1969)]

Evgraf Stepanovich Fedorov (5th Anniversary of His Death). (R) A. V. Shubnikov. 14, 319 (1969) [14, 387 (1969)]

Lev Samilovich Palatnik (On His Sixtieth Birthday). 14, 667 (1970) [14, 767 (1969)]

Georgii Borisovich Bokii (On the Occasion of His Sixtieth Birthday). 14, 837 (1970) [14, 959 (1969)]

Sof'ya Vladimirovna Grum-Grzhimailo (1908-1969). 14, 989 (1970) [14, 1123 (1969)]

PRODUCTION OF CRYSTALS

Crystallization from the Gas Phase

Development of Nonsingular Surfaces on Crystals Growing from the Vapor Phase. (E/T) E. D. Dukova and D. Nenov. 14, 83 (1969) [14, 106 (1969)]

Oriented Crystallization of Vacuum-Deposited Cadmium Sulfide. (E) T. A. Mingazin and E. M. Smirnova. 14, 300 (1969) [14, 366 (1969)†]

Production of Epitaxial CdS Films by Gas Transport Reactions. (E) S. A. Aitkhozhin, I. M. Kotelyanskii, G. B. Bokii, V. F. Dvoryankin, G. G. Dvoryankina, and V. V. Panteleev. 14, 309 (1969) [14, 373 (1969)]

Crystal Orientation in Lead Sulfide Films Vacuum-Deposited on Muscovite. (E) S. A. Semiletov, R. V. Kudryavtseva, V. N. Pogodina, and V. V. Karabinskaya. 14, 402 (1969) [14, 491 (1969)]

Various Properties of Epitaxial Films of Si Obtained by Sublimation in Vacuum from Sources Doped with As and P. (E) V. P. Kuznetsov and V. V. Postnikov. 14, 441 (1969) [14, 529 (1969)]

Morphology of ZnSe Crystals Grown by Means of a Chemical Transport Reaction. (E) A. A. Simanovskii. 14, 960 (1970) [14, 1098 (1969)]

Oriented Crystallization of Gold on a Sodium Chloride Crystal Surface through an Amorphous Carbon Film. (T) Yu. M. Gerasimov and G. I. Distler. 14, 964 (1970) [14, 1101 (1969)]

Effect of an Electrostatic Field on the Kinetics of Selenium Crystallization from the Gas Phase. (E) G. B. Abdullaev, A. I. Odobesku, and A. Yu. Kon. 14, 972 (1970) [14, 1108 (1969)]

Crystallization from the Melt

Nucleation During Crystal Growth. (T/E) V. F. Dorfman, M. B. Galina, and L. I. Trusov. 14, 55 (1969) [14, 71 (1969)]

Certain Characteristics of the Crystallization of a Molten Drop. (E) G. A. Kurov, A. I. Petrin, and V. V. Ignat'ev. 14, 122 (1969) [14, 144 (1969)]

Mode of Formation of Diamonds from Graphite in the Presence of Metals. (T) G. B. Bokii and A. I. Volkov. 14, 126 (1969) [14, 147 (1969)]

Growth of Nickel–Germanium Alloy Single Crystals from the Melt. (E) N. I. Sudakov, V. I. Kovrigin, and B. A. Ayurzanain. 14, 316 (1969) [14, 379 (1969)]

Hydrothermal Crystallization in the System $A_2O-TR_2O_3-SiO_2-H_2O$. I. Synthesis of Crystals of Alkali Metal Yttrium Silicates. (E) B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov. 14, 407 (1969) [14, 498 (1969)]

Hydrothermal Crystallization in the $A_2O-TR_2O_3-SiO_2-H_2O$ System. II. Synthesis of Sc-Silicates of Alkali Elements. (E) B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov. 14, 447 (1969) [14, 534 (1969)]

Distribution of Volatile Impurities Ahead of the Crystallization Front in a Melt. (T) B. D. Lainer, V. V. Voronkov, M. G. Mil'vidskii, and V. V. Rakov. 14, 451 (1969) [14, 537 (1969)]

Hydrothermal Growth of Large Dislocation-Free Crystals of Quartz. (E) L. A. Gordienko, V. F. Miuskov, V. E. Khadzhi, and L. I. Tsinober. 14, 454 (1969) [14, 539 (1969)]

The Hydrothermal Crystallization of Sb_2S_3. (E/T) V. I. Popolitov. 14, 461 (1969) [14, 545 (1969)]

Calculation of the Crystallization Rate for Droplets of Melt on a Dissimilar Substrate. (T) V. S. Ravin. 14, 642 (1970) [14, 744 (1969)]

Crystallization of Nonstoichiometric Melts of Decomposable Compounds. (T/E) B. D. Lainer, A. V. Berkova, M. G. Mil'vidskii, and V. V. Rakov. 14, 743 (1970) [14, 867 (1969)]

Solubility and Crystallization of Yttrium-Iron Garnet in Melts. (E) V. A. Timofeeva and N. I. Luk'yanova. 14, 757 (1970) [14, 884 (1969)]

Effect of Rotation of the Face Paths during Growth of Germanium Single Crystals. (E) A. N. Kirgintsev and Yu. A. Rybin. 14, 831 (1970) [14, 954 (1969)]

Hydrothermal Crystallization in $MeMoO_4-LiCl-H_2O$ Systems. (E) L. N. Dem'yanets. 14, 833 (1970) [14, 955 (1969)]

Effect of Impurity Evaporation from a Melt on the Transient Period of Impurity Repulsion. (T) V. V. Voronkov, M. G. Mil'vidskii, and O. V. Pelevin. 14, 951 (1970) [14, 1091 (1969)]

On the Nature of "Growth Bands" in Epitaxial Layers of GaP_xAs_{1-x}. (T) F. A. Gimel'farb, E. S. Kopeliovich, V. N. Maslov, R. L. Petrusevich, and V. I. Fistul'. 14, 967 (1970) [14, 1104 (1969)]

Crystallization from the Solution

Crystallization in the $Na_2O-Al_2O_3-SiO_2-H_2O$ System. (E) B. N. Litvin and O. K. Mel'nikov. 14, 79 (1969) [14, 101 (1969)]

Solubility and Crystallization of Yttrium and Rare-Earth Orthovandates. (E) V. A. Timofeeva, V. I. Popov, and T. S. Kon'kova. 14, 128 (1969) [14, 150 (1969)]

Calculation of the Kinetic Coefficient and Activation Energy for Growth at Low Supersaturation. (T) E. B. Treivus. 14, 290 (1969) [14, 355 (1969)]

Peculiarities of Crystallization of Barium Hexaferrite on Seeds. (E) S. Sh. Gendelev, R. I. Zvereva, and L. D. Fedorovich. 14, 457 (1969) [14, 542 (1969)]

Growth Rate of the {010} Plane of Rochelle Salt in the Presence of Pure Direct Sky Blue Dye. (E) V. N. Portnov, A. V. Rykhlyuk and A. V. Belyustin. 14, 643 (1970) [14, 744 (1969)]

Morphology and Surface Kinetics of the Growth of β-Methylnaphthalene from Alcohol Solution: An Intermediate Adsorption Film of Melt. (E) E. D. Dukova and E. V. Gavrilenko. 14, 736 (1970) [14, 856 (1969)]

Kinetics of the Hydrothermal Crystallization of Quartz in Different Solutions and the Adsorption Film Hypothesis. (T/E) A. A. Chernov and V. A. Kuznetsov. 14, 753 (1970) [14, 879 (1969)]

Solubility and Crystallization of Yttrium-Iron Garnet in Melts. (E) V. A. Timofeeva and N. I. Luk'yanova. 14, 757 (1970) [14, 884 (1969)]

Dependence of the Rates of Growth and Solution of Spherical Single Crystals of $Zn(NH_4)_2(SO_4)_2 \cdot 6H_2O$ on Their Velocities in Solution. (E) A. V. Belyustin and G. D. Pavlova. 14, 829 (1970) [14, 952 (1969)]

Growth Rate of Rochelle Salt Crystals As a Function of Solution Supersaturation. (E) I. M. Levina and A. V. Belyustin. 14, 954 (1970) [14, 1093 (1969)]

The Reason for Recrystallization in Solutions. (E) I. G. Bazhal. 14, 970 (1970) [14, 1106 (1969)]

Influence of Cation Impurities on the Growth of Filamentary NaCl Crystals from the Solution. (E/T) É. Hartmann. 14, 986 (1970) [14, 1120 (1969)]

Etching of Crystals

Some Characteristics of the Etching of Germanium with Iodine Vapor. (E) B. S. Kurbatov and G. A. Kurov. 14, 286 (1969) [14, 352 (1969)]

Etch Figures on Yttrium-Aluminum Garnet Crystals. (E) I. A. Zhizheiko and Kh. S. Bagdasarov. 14, 288 (1969) [14, 354 (1969)]

Hydrothermal Etching of Matched Fractured Prism Faces of Quartz. (E) M. S. Joshi and P. N. Kotru. 14, 427 (1969) [14, 516 (1969)]

External Morphology

The Structure and Kinetics of Advance of a Monomolecular Step on a Crystalline Surface. (T) D. E. Temkin. 14, 179 (1969) [14, 227 (1969)]

Evaluation of Deviations from Isomorphism in Protein Crystals. (E/T) V. Sh. Raiz and N. S. Andreeva. 14, 360 (1969) [14, 437 (1969)]

Morphology of ZnSe Crystals Grown by Means of a Chemical Transport Reaction. (E) A. A. Simanovskii. 14, 960 (1970) [14, 1098 (1969)]

Growing of Crystals

Nucleation During Crystal Growth. (T/E) V. F. Dorfman, M. B. Galina, and L. I. Trusov. 14, 55 (1969) [14, 71 (1969)]

Mode of Formation of Diamonds from Graphite in the Presence of Metals. (T) G. B. Bokii and A. I. Volkov. 14, 126 (1969) [14, 147 (1969)]

Production and Optical Properties of $Bi_{12}GeO_{20}$ Single Crystals. (E) A. I. Safonov, S. A. Baryshev, T. I. Nikoforova, G. N. Antonov, and S. A. Fedulov. 14, 131 (1969) [14, 152 (1969)]

Anisotropy in the Growth Rate as Derived from Morphological-Kinetic Data on Growth Steps. (T) A. A. Chernov and E. D. Dukova. 14, 150 (1969) [14, 169 (1969)]

Electrostatic Effects in the Formation of Nuclei (Seeds) at a Surface. (T) A. A. Chernov and L. I. Trusov. 14, 172 (1969) [14, 218 (1969)]

Kinetics of the Growth of a Hexagonal Selenium Crystal from Single Crystals of α and β Monoclinic Selenium. (E) Yu. G. Asadov. 14, 292 (1969) [14, 356 (1969)]

The Preparation and Certain Properties of Single-Crystal $LaNbO_4$. (E) L. M. Belyaev, F. I. Dmitrieva, N. M. Melankholin, A. A. Popova, and L. V. Soboleva. 14, 294 (1969) [14, 359 (1969)]

Preparation and Physicochemical Properties of the Compounds $Bi_{12}GeO_{20}$ and $Bi_4(GeO_4)_3$. (E) Yu. S. Kuz'minov, M. G. Lifshits, and V. D. Salnikov. 14, 297 (1969) [14, 363 (1969)]

Hydrothermal Synthesis of $KZnF_3$ Single Crystals with a Perovskite Structure. (E) M. M. Lukina and G. P. Klientova. 14, 314 (1969) [14, 377 (1969)]

Growth of Nickel–Germanium Alloy Single Crystals from the Melt. (E) N. I. Sudakov, V. I. Kovrigin, and B. A. Ayurzanain. 14, 316 (1969) [14, 379 (1969)]

The Growth of Potassium Hydrogen Phthalate Crystals and Their Optical, Piezoelectric, and Elastic Properties. (E) L. M. Belyaev, G. S. Belikova, A. B. Gil'varg, and I. M. Sil'vestrova. 14, 544 (1970) [14, 645 (1969)]

Growing, Structure, and Magnetic Properties of $PbMn_{1/2}Nb_{1/2}O_3$ Single Crystals. (E) L. A. Drobyshev, B. I. Al'shin, Yu. Ya. Tomashpol'skii, and Yu. N. Venevtsev. 14, 634 (1970) [14, 736 (1969)]

Preparation of Germanium Films on Sapphire by Pyrolysis of Hydrides. (E) T. A. Zeveke, T. I. Medvedeva, and N. N. Sheftal'. 14, 649 (1970) [14, 748 (1969)]

Synthesis and Properties of Mullite. (E) R. L. Dunin-Barkovskii, G. P. Klientova, and E. E. Lisitsyna. 14, 651 (1970) [14, 750 (1969)]

Hydrothermal Synthesis of Iron Thiospinel. (E) S. Yamaguchi. 14, 653 (1970) [14, 752 (1969)]

Crystallization of Neodymium Hydroxyl-Chloride $Nd(OH)_2Cl$ Under Hydrothermal Conditions. (E) L. N. Dem'yanets and E. N. Emel'yanova. 14, 654 (1970) [14, 753 (1969)]

Symmetry of Epitaxial Textures. (E) V. A. Mokievskii and Yu. M. Chashchinov. 14, 669 (1970) [14, 773 (1969)]

Effects of Surface Electrical Properties of a Crystal Substrate on Crystallization. (E) G. I. Distler and V. P. Vlasov. 14, 747 (1970) [14, 872 (1969)]

Synthesis and Mutual Solubility in Spinel Solid Solutions in Me–Ti–Fe–O Systems (Me = Zn, Co, Ni, and Mn). (E) A. A. Shchepetkin, R. G. Zakharov, M. I. Zinigrad, and G. I. Chufarov. 14, 761 (1970) [14, 889 (1969)]

Synthesis, Dielectric, and X-Ray Investigation of Some New Lamellar Ferroelectrics of the (A Bi)$Bi_4Ti_4FeO_{18}$ (A = Ca, Sr, Pb, Ba) Type. (E) F. A. Mirishli and I. G. Ismailzade. 14, 809 (1970) [14, 933 (1969)]

Growth of Vanadium Pentoxide Single Crystals and Their Dislocation Structure. (E) A. S. Abdullaev, L. M. Belyaev, I. V. Binarov, G. F. Dobrzhanskii, and R. G. Yankelevich. 14, 957 (1970) [14, 1095 (1969)]

Growth of Aluminum Garnet Single Crystals Containing a Neodymium Impurity. (E) V. Z. Bychkov, S. A. Fedulov, A. S. Vlasov, B. S. Skidan, and V. K. Balashov. 14, 981 (1970) [14, 1115 (1969)]

Hydrothermal Synthesis in Certain Chloride Systems Containing Paraseodymium and Tungsten Oxides. (E) L. Yu. Kharchenko and P. V. Klevtsov. 14, 983 (1970) [14, 1117 (1969)]

Possible Hydrothermal Synthesis of In_2O_3 Crystals. (E) B. N. Litvin and L. I. Ivanova. 14, 988 (1970) [14, 1122 (1969)]

Impurities (Trapping of Impurities, and Their Influence on on Growth Kinetics)

Influence of Point Defects on the Crystalline Structure of Zinc Sulfide Powders. (E) N. K. Morozova, M. M. Veselkova, A. F. Botnev, and K. V. Shalimova. 14, 74 (1969) [14, 95 (1969)]

Impurity Distribution during Directed Crystallization. (T) I. A. Merzhanov and A. G. Anikin. 14, 146 (1969) [14, 165 (1969)]

The Structure and Kinetics of Advance of a Monomolecular Step on a Crystalline Surface. (T) D. E. Temkin. 14, 179 (1969) [14, 227 (1969)]

Use of the Mössbauer Effect to Study the Distribution of Fe and Sn Impurity Atoms in Vanadium Pentoxide. (E) A. A. Abdullaev, L. M. Belyaev, T. V. Dmitrieva, G. F. Dobrzhanskii, V. V. Ilyukhin, and I. S. Lyubutin. 14, 389 (1969) [14, 473 (1969)]

The Effect of Impurities in Ionic Crystals on the Epitaxy of Gold. (E) A. A. Sokol and V. M. Kosevich. 14, 438 (1969) [14, 527 (1969)]

Distribution of Volatile Impurities Ahead of the Crystallization Front in a Melt. (T) B. D. Lainer, V. V. Voronkov, M. G. Mil'vidskii, and V. V. Rakov. 14, 451 (1969) [14, 537 (1969)]

Effect of Impurity Evaporation from a Melt on the Transient Period of Impurity Repulsion. (T) V. V. Voronkov, M. G. Mil'vidskii, and O. V. Pelevin. 14, 951 (1970) [14, 1091 (1969)]

SCIENTIFIC NEWS ITEMS

First Autumn School on Apparatus and Methods of Studying the Atomic Structure of Matter. (R) Yu. A. Simonov. 14, 480 (1969) [14, 564 (1969)]

STRUCTURES OF REAL CRYSTALS

Impecfections, Special Diffraction Methods for: Degree of Dispersion, Distortion, Mozaicity, Concentration Inhomogeneity, etc. (See also: Theory of Scattering)

Visualization of the Domain Structure of Crystals of Triglycine Sulfate at the Electron-Microscopic Level. (E) G. I. Distler, V. P. Konstantinova, and V. P. Vlasov. 14, 70 (1969) [14, 90 (1969)]

Structural Characteristics of Cubic ZrO_2 Stabilized by Calcium. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 414 (1969) [14, 505 (1969)]

Experimental Study of the Effect of Texture on the Form of Diffraction Lines. (E) A. S. Kagan and S. M. Prokoshina. 14, 429 (1969) [14, 518 (1969)]

Impurity-Atom Disturbance of Matrix Atoms in an Equilibrium Solid Solution. (T) E. Z. Vintaikin and G. G. Gegiadze. 14, 566 (1970) [14, 672 (1969)]

Method of Determining the Contribution of the Defectiveness of the Components to the Overall Defectiveness of Solutions of the MeO Type from the Changes in Their Crystal-Lattice Parameters. (T/E) M. P. Bogdanovich, Yu. P. Vorob'ev, A. N. Men', and G. I. Chufarov. 14, 570 (1970) [14, 677 (1969)]

Temperature Changes in the Structure of Barrier Type Anodic Oxide Films on Aluminum. (E) G. I. Galkin, V. V. Cherny-Shev, and N. E. Markova. 14, 645 (1970) [14, 746 (1969)]

Anomalous Thermal Expansion of ZrO_2 and HfO_2 over the Range 20–1200°C. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 696 (1970) [14, 804 (1969)]

The Polarization of X Rays by Real Crystals and the Determination of Their Mosaic Structure. (T/E) N. M. Olekhnovich. 14, 724 (1970) [14, 840 (1969)]

The Microblock Structure of Hydrothermal Crystals of Corundum. (E) V. N. Voitsekhovskii, P. I. Nikitichev, Z. F. Smirnova, and L. N. Furmakova. 14, 733 (1970) [14, 852 (1969)]

Point Defects in the Borosilicates Danburite and Datolite. (E) L. V. Bershov and V. O. Martirosyan. 14, 823 (1970) [14, 946 (1969)]

Effect of State of Lead Impurity on Mechanical Properties of Potassium Chloride and Sodium Chloride Crystals. (E) O. V. Obukhova, M. M. Tagieva, and M. P. Shaskol'skaya. 14, 825 (1970) [14, 948 (1969)]

On the Normal Vibrations of a Crystal Lattice with a Linear Defect. I. (T) Ya. A. Iosilevskii. 14, 842 (1970) [14, 969 (1969)]
Microhardness Anisotropy of Semiconductor Single Crystals with the Würtzite, Sphalerite, and Diamond Structure. (E) L. G. Tsinzerling, E. S. Berkovich, L. A. Sysoev, and M. P. Shaskol'skaya. 14, 897 (1970) [14, 1037 (1969)]
The Defect Structure of γ- and X-Irradiated Alkali Halide Crystals. (E) E. V. Kolontsova and V. M. Linnik. 14, 903 (1970) [14, 1044 (1969)]

Studies of Dislocations and the Dislocation Structures of Crystals

On the Mechanism of Selective Etching at Dislocations in Zinc. (E) E. G. Popkova, G. S. Matveeva, and A. A. Predvoditelev. 14, 40 (1969) [14, 53 (1969)]
Visualization of the Domain Structure of Crystals of Triglycine Sulfate at the Electron-Microscopic Level. (E) G. I. Distler, V. P. Konstantinova, and V. P. Vlasov. 14, 70 (1969) [14, 90 (1969)]
Influence of Point Defects on the Crystalline Structure of Zinc Sulfide Powders. (E) N. K. Morozova, M. M. Veselkova, A. F. Botnev, and K. V. Shalimova. 14, 74 (1969) [14, 95 (1969)]
Multiplication of Dislocations under the Joint Action of Periodic and Increasing Stresses. (E) R. I. Garber and T. T. Mogil'nikova. 14, 115 (1969) [14, 137 (1969)]
Statistical Investigation of the Distribution of the Distances between Pinning Points of Dislocations. (E/T) A. I. Landau, V. N. Borzhkovskaya, M. T. Torkatyuk, and M. A. Davydova. 14, 238 (1969) [14, 303 (1969)]
Slip Elements and Dislocation Reactions in Ammonium Dihydrophosphate Crystals. (E) N. A. Pasternak, Yu. M. Fishman, N. F. Kirilyuk, and A. A. Predvoditelev. 14, 243 (1969) [14, 310 (1969)]
Anisotropy of Light Scattering at Microscopic Defects in Artificial Quartz. (E) N. M. Melankholin, E. V. Antonov, I. N. Guseva, L. A. Gordienko, and V. E. Khadzhi. 14, 376 (1969) [14, 456 (1969)]
Dislocations in Single Crystals with the Würtzite Structure. (E) A. A. Blistanov and V. V. Geras'kin. 14, 550 (1970) [14, 652 (1969)]
Interaction of Nonparallel Dislocations in an Anisotropic Medium. (T) S. S. Orlov and V. L. Indenbom. 14, 675 (1970) [14, 780 (1969)]
Defect Decoration and Increased Radiation Resistance in Quartz. (E) A. A. Shternberg, L. A. Gordienko, and L. I. Tsinober. 14, 728 (1970) [14, 845 (1969)]
Growth of Vanadium Pentoxide Single Crystals and Their Dislocation Structure. (E) A. S. Abdullaev, L. M. Belyaev, I. V. Binarov, G. F. Dobrzhanskii, and R. G. Yankelevich. 14, 957 (1970) [14, 1095 (1969)]

THEORETICAL CRYSTALLOGRAPHY

Generalizations of Symmetry (except Antisymmetry)

On the Stacking of Octahedral Anion Complexes. (T) G. Z. Pinsker. 14, 17 (1969) [14, 26 (1969)]
Color-Symmetry Space Groups. (T) A. M. Zamorzaev. 14, 155 (1969) [14, 195 (1969)]
The Design of Tables of Shubnikov Space Groups of Dichroic Symmetry. (T) R. P. Ozerov. 14, 323 (1969) [14, 393 (1969)]
Calculation of the Transverse Components of Certain Fourth-Rank Tensors for Single Crystals with a Cubic System by Means of an Electronic Digital Computer. (T/E) I. I. Smyslov. 14, 385 (1969) [14, 468 (1969)]
Close and Closest Packings from Quasi-Spherical Particles. (T) Yu. A. Kharitonov, É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 682 (1970) [14, 788 (1969)]

Symmetry

Symmetry of Epitaxial Textures. (E) V. A. Mokievskii and Yu. M. Chashchinov. 14, 669 (1970) [14, 773 (1969)]

Theory of Crystal Growth, Theory of Dislocations

Theory of Order–Disorder Phase Transitions in Molecular Crystals. II. (T) D. A. Badalyan, A. G. Khachaturyan, and A. I. Kitaigorodskii. 14, 333 (1969) [14, 404 (1969)]
A Kossel Model of the Kinetics of Growth and Evaporation Normal to a {100} Face. (T) D. E. Temkin. 14, 344 (1969) [14, 417 (1969)]
Toward a Theory of Diffusionless Crystal Growth. (T) D. E. Temkin. 14, 349 (1969) [14, 423 (1969)]
Distribution Functions and Diffraction Intensity in a Linear System of Particles. (T) D. Ya. Tsvankin. 14, 355 (1969) [14, 431 (1969)]

Theory of Crystal Structure Determination

Optimum Planning of Experiments for the Harmonic Analysis of Line Shapes. (T) M. A. Shtremel'. 14, 24 (1969) [14, 34 (1969)]
Calculation of the Size Effect for Polycrystalline Aggregates on the Basis of a Microscopic Theory. (T) A. A. Katsnel'son. 14, 32 (1969) [14, 44 (1969)]
Numerical Notation for Describing the Structures of the Hexaferrites. (T) M. A. Vinnik and V. E. Semenov. 14, 103 (1969) [14, 126 (1969)]
Normal Modes of a Crystal Lattice with a Two-Dimensional Defect. (T) Ya. A. Iosilevskii. 14, 160 (1969) [14, 201 (1969)]
False Maxima in Structure-Separating Functions. (T) V. I. Simonov, B. M. Shchedrin, and A. M. Soldatenkov. 14, 186 (1969) [14, 237 (1969)]
Modification of the Differential Synthesis Method. (T) B. M. Shchedrin. 14, 193 (1969) [14, 247 (1969)]
Geometry of Measurements of the Integral Intensity for Single Crystals in Diffractometers by Inclined Exposure Schemes. (T) D. M. Kheiker, L. V. Gorbatyi, and É. L. Lube. 14, 196 (1969) [14, 251 (1969)]
Calculation of the Structure and Lattice-Energy Surface of Naphthalene and Anthracene Crystals. (T) K. V. Mirskaya and I. E. Kozlova. 14, 339 (1969) [14, 412 (1969)]
Calculation of the Transverse Components of Certain Fourth-Rank Tensors for Single Crystals with a Cubic System by Means of an Electronic Digital Computer. (T/E) I. I. Smyslov. 14, 385 (1969) [14, 468 (1969)]
Smoothing of the Electron Distribution Function by Modification of Its Fourier Coefficients. (T) B. M. Shchedrin and V. I. Simonov. 14, 411 (1969) [14, 502 (1969)]
Two-Dimensional Green's Functions for Simple Lattices. (T) Ya. A. Iosilevskii. 14, 489 (1970) [14, 577 (1969)]
Minimization of the Divergence Factor of Structures by Application of a Random Search Method. (T) L. A. Muradyan, A. F. Deart, and V. I. Burdina. 14, 501 (1970) [14, 593 (1969)]
Crystal Structure Determination Using the Q Function. (T) A. V. Kolpakov and R. N. Kuz'min. 14, 504 (1970) [14, 597 (1969)]
Application of the Least-Squares Method for Refinement of Crystal Structures from Powder Spectrum Data. (T) F. A. Brusentsev. 14, 581 (1970) [14, 690 (1969)]

Theory of Scattering of X Rays, Electrons, and Neutrons

The Atomic Scattering Factor of Germanium. (E) K. P. Mamedov. 14, 113 (1969) [14, 135 (1969)]
Linear Peak Triplets in Vector Systems Corresponding to Centrosymmetric and Acentric Fundamental Systems. (T) É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 916 (1970) [14, 1059 (1969)]
Graphical Construction of Diffuse-Scattering Regions. (E) G. V. Kleshchev, D. V. Shumilov, A. I. Sheinkman, and V. N. Panov. 14, 948 (1970) [14, 1088 (1969)]

Theory of the Solid State

Configuration of d^3d^1)-Electrons in a Monoclinic Field. (T) T. F. Veremeichik and D. T. Sviridov. 14, 704 (1970) [14, 814 (1969)]

THERMAL AND THERMODYNAMIC PROPERTIES

Temperature Fields in Optical Single Crystals at High Temperatures. (T) L. A. Pigal'skaya. 14, 279 (1969) [14, 347 (1969)]

Thermal Expansion of NH_4Cl and ND_4Cl between 100°K and 273°K. (E) A. A. Boiko. 14, 539 (1970) [14, 639 (1969)]

X-Ray Investigation of Thermal Expansion in Synthetic and Natural Diamonds. (E) M. I. Sokhor and V. D. Vitol. 14, 632 (1970) [14, 734 (1969)]

Anomalous Thermal Expansion of ZrO_2 and HfO_2 over the Range 20-1200°C. (E) S. K. Filatov and V. A. Frank-Kamenetskii. 14, 696 (1970) [14, 804 (1969)]

The Thermal Expansion of Potassium Dihydrogen Phosphate in the Vicinity of the Ferroelectric Phase Transition. (E) A. A. Boiko and Liu Tan Fat. 14, 712 (1970) [14, 825 (1969)]

Study of the Thermal Expansion of Molecular Crystals. 3. Determination of the Unit Cell Parameters and Anisotropy in the Thermal Expansion of Biphenyl at Low Temperatures. (T/E) V. M. Kozhin and K. V. Mirskoya. 14, 938 (1970) [14, 1077 (1969)]

THIN FILMS

Structure of Cadmium Sulfide Films Sublimated onto Slid Faces of Single NaCl, KCl, and KBr Faces. (E) A. G. Mikolaichuk, Ya. I. Dutchak, and D. M. Freik. 14, 148 (1969) [14, 167 (1969)]

X-Ray Investigation of Crystallization Processes in Antimony Trisulfide Films. (E) E. M. Smirnova, T. A. Mingazin, and M. N. Odlis. 14, 303 (1969) [14, 367 (1969)]

On the Orientations in Thin Films of Bismuth and Its Oxide. (E) A. A. Zav'yalova and R. M. Imamov. 14, 305 (1969) [14, 369 (1969)]

Production of Epitaxial CdS Films by Gas Transport Reactions. (E) S. A. Aitkhozhin, I. M. Kotelyanskii, G. B. Bokii, V. F. Dvoryankin, G. G. Dvoryankina, and V. V. Panteleev. 14, 309 (1969) [14, 373 (1969)]

Preparation of Germanium Films on Sapphire by Pyrolysis of Hydrides. (E) T. A. Zeveke, T. I. Medvedeva, and N. N. Sheftal'. 14, 649 (1970) [14, 748 (1969)]

The Crystallization of Thin Layers of Supercooled Gallium. (E) V. T. Borisov and Yu. E. Matveev. 14, 765 (1970) [14, 895 (1969)]

Production of Thin Films of the α-Modification of Mercury Sulfide. (E) B. F. Bilen'kii, M. V. Miliyanchuk, M. V. Pashkovskii, and I. V. Savitskii. 14, 975 (1970) [14, 1111 (1969)]